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     (FILE 'HOME' ENTERED AT 11:20:53 ON 11 SEP 2009)
     FILE 'REGISTRY' ENTERED AT 11:21:02 ON 11 SEP 2009
L1
             1 S OLANZAPINE/CN
    FILE 'REGISTRY' ENTERED AT 11:22:33 ON 11 SEP 2009
    FILE 'STNGUIDE' ENTERED AT 11:23:29 ON 11 SEP 2009
    FILE 'REGISTRY' ENTERED AT 11:24:15 ON 11 SEP 2009
L2
             1 S L1 FAM SAM
L3
            97 S 132539-06-1/CRN
            98 S L1 OR L3
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L5
             1 S 132539-06-1/RN
     FILE 'REGISTRY' ENTERED AT 11:29:07 ON 11 SEP 2009
L6
               STR 132539-06-1
L7
            110 S L6 FAM FUL
                DEL SEL Y
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L8
                OUE E2-E129
    FILE 'HCAPLUS' ENTERED AT 11:34:55 ON 11 SEP 2009
    FILE 'STNGUIDE' ENTERED AT 11:35:07 ON 11 SEP 2009
    FILE 'HCAPLUS' ENTERED AT 11:36:58 ON 11 SEP 2009
L9
          3346 S L8
        139365 S (CRYST?) AND (POLYMORPH? OR POLYTYP? OR POLYSTRUCTUR? OR DIMO
L10
L11
            83 S L9 AND L10
    FILE 'STNGUIDE' ENTERED AT 11:38:50 ON 11 SEP 2009
    FILE 'HCAPLUS' ENTERED AT 11:51:33 ON 11 SEP 2009
    FILE 'REGISTRY' ENTERED AT 11:52:02 ON 11 SEP 2009
    FILE 'HCAPLUS' ENTERED AT 11:52:11 ON 11 SEP 2009
L12
             1 S US20080280884/PN
L13
             1 S US20080188465/PN
L14
              1 S US20070191348/PN
                SELECT RN L12 1-
                SELECT RN L13 1-
                SELECT RN L14 1-
     FILE 'REGISTRY' ENTERED AT 11:53:00 ON 11 SEP 2009
L15
            28 S E130-167
             25 S L15 NOT L7
L16
    FILE 'STNGUIDE' ENTERED AT 11:54:39 ON 11 SEP 2009
    FILE 'REGISTRY' ENTERED AT 11:57:05 ON 11 SEP 2009
L17
             3 S L15 NOT L16
L18
             1 S L17 AND PROPANOL
             1 S L17 AND TETRAHYDROFURAN
L19
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L20	1	S	L17 NOT (L18 OR L19)
	FILE 'HCAPI	JU:	S' ENTERED AT 12:03:02 ON 11 SEP 2009
L21	1	S	L18
L22	2	S	L19
L23	532528	S	CRYSTAL STRUCTURE/IT
L24	14645	S	CRYSTAL MORPHOLOGY/IT
L25	544125	S	L23 OR L24
L26	52	S	L9 AND L25
L27	96	S	L11 OR L26

=> d ibib abs hitstr total

L27 ANSWER 1 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:743098 HCAPLUS

DOCUMENT NUMBER: 151:64057

TITLE: Injectable nanoparticulate olanzapine

formulations

INVENTOR(S): Ruddy, Stephen B.; Czekai, David; Liversidge, Gary;

Jenkins, Scott A.; Liversidge, Elaine M.

PATENT ASSIGNEE(S): Elan Pharma International Limited, Ire.

SOURCE: U.S. Pat. Appl. Publ., 20pp., Cont.-in-part of U.S.

Ser. No. 274,887.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20090155331	A1	20090618	US 2008-333233	20081211
US 20060154918	A1	20060713	US 2005-274887	20051116
PRIORITY APPLN. INFO.:			US 2005-274887 A	2 20051116
			US 2004-628748P P	20041116

AB Described are injectable formulations of particulate olanzapine that produce a prolonged duration of action upon administration, and methods of making and using such formulations. The injectable formulations comprise particulate olanzapine.

IT 132539-06-1, Olanzapine

RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (injectable nanoparticulate olanzapine formulations)

RN 132539-06-1 HCAPLUS

L27 ANSWER 2 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2008:1526982 HCAPLUS
DOCUMENT NUMBER: 150:41197
TITLE: Novel processes to form-I of olanzapine

INVENTOR(S): Guntoori, Bhaskar Reddy; Kothakonda, Kiran Kumar; Che,

Daqing; McPhail, Cameron L.
PATENT ASSIGNEE(S): Apotex Pharmachem Inc., Can.

SOURCE: Can. Pat. Appl., 16pp.

CODEN: CPXXEB

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT	NO.		KIN	D	DATE			APPL	ICAT	ION 1	NO.		D.	ATE	
	0312433		A1		2008	1218			007-	9769	44		2	0070	030
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	FI, GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,
	KG, KM,	KN,	KΡ,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
	ME, MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,
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AB A process for obtaining crystalline Form-I olanzapine comprising the following: (a) dissolving crude olanzapine in a solvent to form a solution, (b) optionally drying by azeotropic distillation to remove water, (c) precipitating by adding the solution of step (a) to an antisolvent,

and (d) isolating the precipitated crystalline Form-I olanzapine by filtration and drying at ambient temperature

IT 132539-06-1, Zyprexa

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (novel processes to form-I of olanzapine)

RN 132539-06-1 HCAPLUS

L27 ANSWER 3 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:1512324 HCAPLUS

DOCUMENT NUMBER: 150:63780

TITLE: Novel processes to form-I of olanzapine

INVENTOR(S): Che, Daqing; Kothakonda, Kiran Kumar; McPhail,

Cameron; Guntoori, Bhaskar Reddy

PATENT ASSIGNEE(S): Apotex Pharmachem Inc., Can.

SOURCE: PCT Int. Appl., 13pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

	PAT	CENT 1	NO.			KIN	D	DATE			APPL	ICAT	ION 1	NO.		D	ATE	
	WO	2008	 1514.	 30		A1	_	2008	1218		WO 2	008-	CA11	 24		2	0080	612
		W:	ΑE,	AG,	AL,	AM,	AO,	ΑT,	ΑU,	ΑZ,	ΒA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
			CA,	CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,
			FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,
			KG,	KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
	ME, MG, PL, PT,					MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NΙ,	NO,	NZ,	OM,	PG,	PH,
	PL, PT,				RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ТJ,	TM,
	TN, TR,				TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	ZA,	ZM,	ZW			
	TN, TR, RW: AT, BE,				BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HR,	HU,
			ΙE,	IS,	ΙΤ,	LT,	LU,	LV,	MC,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,	SK,
			TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,
			ΤG,	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,
			ΑM,	ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	$_{ m TM}$							
	CA	2591	644			A1		2008	1214		CA 2	007-	2591	644		2	0070	614
	US	2008	0312	433		A1		2008	1218		US 2	007-	9769	44		2	0071	030
PRIO	RIT	APP:	LN.	INFO	.:						CA 2	007-	2591	644		A 2	0070	614
											US 2	007-	9769	44		A 2	0071	030
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AB A process for obtaining crystalline Form-I olanzapine comprising the following: (a) dissolving crude olanzapine in a solvent to form a solution, (b) optionally drying by azeotropic distillation to remove water, (c) precipitating by adding the solution of step (a) to an antisolvent,

and (d) isolating the precipitated crystalline Form-I olanzapine by filtration and drying at ambient temperature

IT 132539-06-1

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (novel processes to form-I of olanzapine)

RN 132539-06-1 HCAPLUS

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 4 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:1454448 HCAPLUS

DOCUMENT NUMBER: 150:20247

TITLE: Novel carborane and metallacarborane analogs of common

> medicaments and biologically active compounds as agents for BNCT, MRI, and other physical diagnostic

> > DATE

methods

INVENTOR(S): Hey-Hawkins, Evamarie; Scholz, Matthias

PATENT ASSIGNEE(S): Universitaet Leipzig, Germany

SOURCE: PCT Int. Appl., 168pp.

CODEN: PIXXD2

PATENT NO. KIND DATE APPLICATION NO.

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

						_									_			
	WO 2008	1457	33		A2		2008	1204		WO 2	008-	EP56	702		2	0080	530	
	WO 2008				А3		2009	0507										
	W:									BA,								
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RN 132539-06-1 HCAPLUS CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

L27 ANSWER 5 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:1451054 HCAPLUS

DOCUMENT NUMBER: 150:20246

TITLE: Novel carborane and metallacarborane analogs of common

medicaments and biologically active compounds as agents for BNCT, MRI, and other physical diagnostic

methods

INVENTOR(S): Hey-Hawkins, Evamarie; Scholz, Matthias

PATENT ASSIGNEE(S): Universitaet Leipzig, Germany

SOURCE: Ger. Offen., 115pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
		A1	20081204	DE 2007-102007026701 WO 2008-EP56702	20070601
	WO 2008145733	A3	20090507		
	W: AE, AG, AL,	AM, AO,	, AT, AU, A	Z, BA, BB, BG, BH, BR,	BW, BY, BZ,
				E, DK, DM, DO, DZ, EC,	
				N, HR, HU, ID, IL, IN,	
				C, LK, LR, LS, LT, LU,	
				Z, NA, NG, NI, NO, NZ,	
				E, SG, SK, SL, SM, SV,	SY, TJ, TM,
				Z, VC, VN, ZA, ZM, ZW	
				K, EE, ES, FI, FR, GB,	
				I, NL, NO, PL, PT, RO,	
				A, GN, GQ, GW, ML, MR,	
				Z, NA, SD, SL, SZ, TZ,	UG, ZM, ZW,
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AB				y 1,2-C2B10H12K1K2, 1,7 boranes 3,1,2-(LnM)C2B1	
				complete replacement o	
				1,4-C6H4 moieties, are	
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	analogs. In an exa				
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	carboranyl indometh	acin ana	alogs, $1-(o-$	-carboran-1-ylcarbonyl)	-5-methoxy-2-
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				thod for the production	and use thereof
	in pharmaceuticals,	as cata	alysts, and	as materials.	
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				CT (Reactant); THU (The	
				nt or reagent);	
				anyl analogs of common	
			stic, therap	peutic and catalytic us	es)
RN	132539-06-1 HCAPLU	S			

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

REFERENCE COUNT:

17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 6 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:1399007 HCAPLUS

DOCUMENT NUMBER: 149:582508

TITLE: Filtration and crystallization process for the preparation of pharmaceutically pure

olanzapine

INVENTOR(S): Gaitonde, Abhay; Manojkumar, Bindu; Bhalerao, Rahul;

Shinde, Dattatraya

PATENT ASSIGNEE(S): Generics UK Limited, UK; Merck Development Centre

Private Limited

SOURCE: PCT Int. Appl., 18pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

		TENT						DATE			APPL						ATE	
	WO	2008 2008	1392	28		A2		2008	1120									
		W:	ΑE,	AG,	AL,	AM,	AO,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
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L27 ANSWER 7 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:917057 HCAPLUS

DOCUMENT NUMBER: 149:183519

TITLE: Process for preparation of substantially pure

polymorphic form of olanzapine

KIND DATE APPLICATION NO.

DATE

INVENTOR(S):
Kozluk, Tomasz

PATENT ASSIGNEE(S): Tomasz Kozluk Nobilus ENT, Pol.

SOURCE: PCT Int. Appl., 21pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

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	WO	2008	0911	69		A 2		2008	0731		WO 2	008-	PL7			20	0800	122	
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								UG,											
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AB	IORITY APPLN. INFO.: PL 2007-381564 A 20070122 This invention relates to process for preparation of substantially pure polymorphic form of olazapine consists in that olanzapine																		
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L27 ANSWER 8 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:294275 HCAPLUS

DOCUMENT NUMBER: 148:456455

TITLE: Process for the preparation of crystalline

form-II of olanzapine

INVENTOR(S): Reddy, Reguri Buchi; Ramesh, Chakka; Reddy, Tamma

Ranga

PATENT ASSIGNEE(S): Dr. Reddys Laboratories Limited, India

SOURCE: Indian Pat. Appl., 14pp.

CODEN: INXXBQ

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	IN 2003MA00105	 А	20070727	IN 2003-MA105	20030206
PRIO	RITY APPLN. INFO.:			IN 2003-MA105	20030206
AB	preparation of form embodies the novel olanzapine, which c monohydrate or olan olanzapine form-I i subsequent cooling	-II of process omprise zapine n an or and iso	olanzapine. for the pre s dissolving dihydrate or ganic solven lation to ge	t or solvents following t the desired polymorph	also e form-II of g by
IT	simple, ecofriendly Olanzapine dihydrat heated until reflux	and we e was s , and t ncentra	ll suited fo uspended in he solution	the present invention r industrial scale up. acetonitrile and was treated with carbor crystalline form-II of	
	DI DDD (D	\ _ CD17			

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(process for preparation of crystalline form-II of olanzapine

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

IT 205485-16-1, Olanzapine dihydrate

●2 H2O

RN 402586-77-0 HCAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,
2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:1) (CA INDEX NAME)

● H2O

L27 ANSWER 9 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:192723 HCAPLUS

DOCUMENT NUMBER: 148:433535

TITLE: Isolation, identification, and synthesis of two oxidative degradation products of olanzapine

(LY170053) in solid oral formulations

AUTHOR(S): Baertschi, Steven W.; Brunner, Heiko; Bunnell, Charles

A.; Cooke, Gary G.; Diseroad, Benjamin; Dorman, Douglas E.; Jansen, Patrick J.; Kemp, Craig A. J.; Maple, Steven R.; McCune, Karen A.; Speakman, Jeffrey

L.

CORPORATE SOURCE: Analytical Sciences Research and Development, Lilly

Corporate Center, Eli Lilly and Company, Indianapolis,

IN, 46285, USA

SOURCE: Journal of Pharmaceutical Sciences (2007), Volume Date

2008, 97(2), 883-892

CODEN: JPMSAE; ISSN: 0022-3549

PUBLISHER: Wiley-Liss, Inc.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 148:433535

AB Two impurities found in both stressed and aged solid-state formulations of olanzapine have been identified as

(Z)-1,3-dihydro-4-(4-methyl-1-piperazinyl)-2-(2-oxo-propylidene)-2H-1,5-benzodiazepin-2-one (1) and (Z)-1-[1,2-dihydro-4-(4-methyl-1-piperazinyl)-2-thioxo-3H-1,5-benzodiazepin-3-ylidene]propan-2-one (2). The structures indicate that the two impurities are degradation products resulting from oxidation of the thiophene ring of olanzapine. The impurities were isolated by preparative HPLC from a thermally stressed formulation, and characterized by UV, IR, MS, and NMR. A synthetic preparation of compds. 1 and 2 by reaction of olanzapine with the singlet oxygen mimic 4-phenyl-1,2,4-triazoline-3,5-dione (PTAD) is presented. The structure of 2 was also determined by single-crystal x-ray diffraction anal. A degradation

pathway for the formation of 1 and 2 is proposed. 132539-06-1DP, Olanzapine, adduct formation with

4-phenyl-1, 2, 4-triazoline-3, 5-dione

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(isolation, identification, and synthesis of two oxidative degradation products of olanzapine (LY170053) in solid oral formulations)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

ΤТ

IT 132539-06-1, Olanzapine

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (isolation, identification, and synthesis of two oxidative degradation products of olanzapine (LY170053) in solid oral formulations)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

REFERENCE COUNT:

10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 10 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:10586 HCAPLUS

DOCUMENT NUMBER: 148:106026

TITLE: Preparation of crystalline hydrohalide of an

organic amine

INVENTOR(S): Wieser, Josef; Lengauer, Hannes; Klingler, Elfriede;

Pichler, Arthur; Sturm, Hubert

PATENT ASSIGNEE(S): Sandoz A.-G., Switz. SOURCE: PCT Int. Appl., 77 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

	PAT	CENT :	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D.	ATE	
		2008 2008				A2		2008 2008			WO 2	007-	 EP55	96		2	0070	625
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		RW:																
		RW: AT, BE, E				LU,	LV,	MC,	MΤ,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
			ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG,	BW,
			GH,	GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,
			BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑP,	EA,	EP,	ΟA					
	ΑU	2007	2640.	30		A1		2008	0103		AU 2	007-	2640	30		2	0070	625
	CA	2655	061			A1		2008	0103		CA 2	007-	2655	061		2	0070	625
	ΕP	2032	521			A2		2009	0311		EP 2	007-	7858	45		2	0070	625
		R:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
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AB The present invention provides a new method for preparation and crystn . of hydrochlorides, hydrobromides or hydroiodides of pharmaceutical compds. or their intermediates in which the base or its acid addition salt is reacted in a solvent with a Trialkylsilylhalogenide. For example, mycophenolate mofetil base 2 g were dissolved in Et acetate 50 mL at room temperature To this solution acetic acid 0.3 mL and trimethylchlorosilane 0.7

mL were added under stirring. After 2 min at room temperature the crystn . started. The suspension was stirred for 1 h and the precipitate filtered

The solid was washed with Et acetate and dried under vacuum at room temperature to yield 2.11 g (97.6 %) of mycophenolate mofetil hydrochloride.

IT 783334-35-0P, Olanzapine dihydrochloride

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of crystalline hydrohalide of an organic amine)

RN 783334-35-0 HCAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,
2-methyl-4-(4-methyl-1-piperazinyl)-, hydrochloride (1:2) (CA INDEX NAME)

●2 HC1

L27 ANSWER 11 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:1454159 HCAPLUS

DOCUMENT NUMBER: 148:61893

TITLE: Stabilization of olanzapine

polymorphic form I

INVENTOR(S): Kashid, Namdev; Mukherji, Gour PATENT ASSIGNEE(S): Jubilant Organosys Limited, India

SOURCE: PCT Int. Appl., 14pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATI	ENT :	NO.			KIN	D	DATE		1	APPL	ICAT	ION 1	NO.		D.	ATE	
WO 2	2007	1449	01			_	2007	1221		WO 2	007-	 IN23	 3		2	0070	612
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		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FΙ,
		GB, GD, GE KM, KN, KE			GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,
		KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ΜE,
		MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,
		PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,
		TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	ZA,	ZM,	ZW				
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	IE,
		IS,	ΙΤ,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG,	BW,
		GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,
		BY,	KG,	KΖ,	MD,	RU,	ТJ,	$_{ m IM}$									
RITY	APP	LN.	INFO	.:						IN 2	006-	DE14	00	ž	A 2	0060	612

PRIORITY APPLN. INFO.: IN 2006-DE1400 A 2000 AB Disclosed is a process for stabilization of polymorphic Form I

of olanzapine. Said process comprises of micronizing said olanzapine in a fluid energy mill employing nitrogen or carbon dioxide.

IT 132539-06-1, Olanzapine

RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (stabilization of olanzapine polymorphic form I)

RN 132539-06-1 HCAPLUS

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 12 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:1375717 HCAPLUS

DOCUMENT NUMBER: 148:246110

TITLE: Polymorphism in drugs investigated by low

wavenumber Raman scattering

AUTHOR(S): Ayala, Alejandro Pedro

CORPORATE SOURCE: Departamento de Fisica, Universidade Federal do Ceara,

Fortaleza, CE, 60.455-900, Brazil

SOURCE: Vibrational Spectroscopy (2007), 45(2), 112-116

CODEN: VISPEK; ISSN: 0924-2031

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

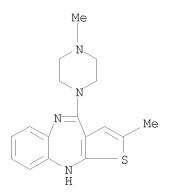
Raman scattering is a powerful method to investigate the polymorphism in drugs due to its remarkable sensitivity to the crystalline structure of mol. compds. The sensitivity of the technique is strongly enhanced when considering the low wavenumber Raman active vibrational modes, since mol. skeleton deformations, librations and translations usually lay below 200 cm-1 and are directly related to the polymorphism phenomenon. In this work, the potential of the low energy Raman spectrum in the investigation of polymorphism of drugs is discussed. Several examples are presented showing the use of this spectral range in the understanding of the mechanism involved in the polymorphic behavior of active pharmaceutical ingredients. The results show that low wavenumber Raman spectra can be used for rapidly and accurately identifying the polymorphic forms of an active ingredient. Addnl. valuable information is obtained when combining spectroscopic measurements with ab initio calcns., x-ray diffraction measurements and thermal anal.

IT 132539-06-1, Olanzapine

RL: ANT (Analyte); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses) (polymorphism in drugs investigated by low wavenumber Raman scattering)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD

(3 CITINGS)

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 13 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:1363789 HCAPLUS

DOCUMENT NUMBER: 147:548134

TITLE: Olanzapine pharmaceutical composition INVENTOR(S): Osinga, Niels Jaap; Dorkoosh, Farid Abedin

PATENT ASSIGNEE(S): Synthon B.V., Neth. SOURCE: PCT Int. Appl., 16pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PAT	TENT	NO.			KIN)	DATE								D.	ATE		
		2007 2007								1	WO 2					2	0070	518	
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			CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	
			GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	
			KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	MG,	MK,	
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		TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FI IS IT LT LU LV MC MT NL PL PT RO S																	
		RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, F IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, S																	
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		BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA															AM,	AZ,	
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CN	10F		eno[2,3-	b][1	_	enzo	diaz	epin	e, 2	-met]	hyl-	4-(4-	-metl	hyl-	1-pi	pera	zinyl)-	

L27 ANSWER 14 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:1312460 HCAPLUS

DOCUMENT NUMBER: 148:523325

TITLE: Process for the preparation of Form I of

Olanzapine

AUTHOR(S): Anon. CORPORATE SOURCE: USA

SOURCE: IP.com Journal (2007), 7(10B), 6 (No.

IPCOM000158856D), 2 Oct 2007
CODEN: IJPOBX; ISSN: 1533-0001

PUBLISHER: IP.com, Inc. DOCUMENT TYPE: Journal; Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IP 158856D		20071002	IP 2007-158856D	20071002
PRIORITY APPLN. INFO.:			IP 2007-158856D	20071002

AB Processes for obtaining substantially pure Olanzapine Form I by spray drying technique and the preparation of substantially pure Olanzapine Form I by crystallization are disclosed.

IT 132539-06-1, Olanzapine

RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (preparation of form I of olanzapine by spray drying and crystallization)

RN 132539-06-1 HCAPLUS

L27 ANSWER 15 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:1096869 HCAPLUS

DOCUMENT NUMBER: 147:350746

TITLE: Use of olanzapine for the preparation of

pharmaceutical compositions treating insomnia

INVENTOR(S): Tran, Pierre V.

PATENT ASSIGNEE(S): USA

SOURCE: Hung. Pat. Appl., 22pp.

CODEN: HUXXCV

DOCUMENT TYPE: Patent LANGUAGE: Hungarian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
HU 9902882	A2	20000228	HU 1999-2882	19970307
HU 9902882	A3	20000428		

PRIORITY APPLN. INFO.: HU 1999-2882 19970307

The subject of the invention is the olanzapine, or the application of the pharmaceutically suitable salt of this compound for the preparation of pharmaceutical compns. for the treatment of insomnia. According to the invention, preferably, the olanzapine polymorph of form is used. X-ray powder diffraction data are presented. Thus 270 g tech. grade olanzapine was dissolved in 2.7 L ethylacetate; heated, cooled and the product was filtered in vacuum. The obtained olanzapine was formulated to tablets that contained (weight/weight%): hydroxypropyl cellulose 4.0; olanzapine 1.18; lactose 79.32; povidone 5; cellulose 10; magnesium stearate 0.5. Tablets were coated with a mixture of hydroxypropyl cellulose, polyethylene and titania; coated tablets were treated with carnauba wax for printing the identification code.

IT 132539-06-1, Olanzapine 132539-06-1D,

Olanzapine, salts

RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(use of olanzapine for preparation of pharmaceutical compns.

treating insomnia)

RN 132539-06-1 HCAPLUS

RN 132539-06-1 HCAPLUS CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

L27 ANSWER 16 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:1064452 HCAPLUS

DOCUMENT NUMBER: 147:371627

TITLE: Process for producing pure and stable form of

2-methyl-4-(4-methyl-1-piperazinyl)-10h-thieno[2,3-b]

APPLICATION NO.

DATE

[1,5]benzodiazepine

INVENTOR(S): Panchasara, Dinesh; Gupta, Poorvi; Kaushik, Geetesh;

Dubey, Sushil Kumar

DATE

PATENT ASSIGNEE(S): Jubilant Organosys Ltd., India

KIND

SOURCE: PCT Int. Appl., 26pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.

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                                               WO 2006-IN91
     WO 2007105225
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                                   20070920
                                                                         20060314
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
              CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,
              MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
              VN, YU, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
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              CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
              GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
              KG, KZ, MD, RU, TJ, TM
     WO 2006006180
                                   20060119
                                               WO 2004-IN207
                           Α1
                                                                         20040714
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              LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
              NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
              TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
          RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
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              CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS,
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              RU, TJ, TM
     EP 1994013
                                                EP 2006-728410
                                   20081126
                                                                         20060314
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            AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
              IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR
                                                JP 2009-500003
     JP 2009530267
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                                   20090827
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                                                KR 2008-724239
     KR 2009008205
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                                   20090121
                                                                          20081002
PRIORITY APPLN. INFO.:
                                                WO 2004-IN207
                                                                      A2 20040714
                                                WO 2006-IN91
                                                                      W 20060314
     This invention relates to an improved process for producing pure and
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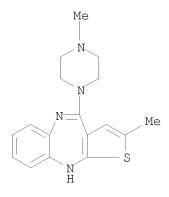
thermally color stable crystalline form I of 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5] benzodiazepine and product thereof. The process comprises of reacting 2-(2-aminoanilino)-5-methylthiophene-3-carbonitrile with N-Me piperazine in conjunction with N-methylpiperazine acid salt, to produce 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]

ΙT

RN

CN

benzodiazepine. Also disclosed is a process for obtaining the polymorphic form I of 2-methyl-4-(4-methyl-1-piperazinyl)-10Hthieno[2,3-b][1,5] benzodiazepine by crystallizing the crude 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno [2,3-b][1,5] benzodiazepine in a mixture of solvents. Further the invention also provides a new polymorph of olanzapine, dihydrate form and process for its preparation and a new hydrate form of olanzapine having moisture content 1 - 3% and process for its preparation 205485-16-1P, Olanzapine dihydrate 928835-85-2P RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (process for producing pure and stable form of 2-Me-4-(4-Me-1-piperazinyl)-10h-thieno[2,3-b] [1,5]benzodiazepine) 205485-16-1 HCAPLUS 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:2) (CA INDEX NAME)

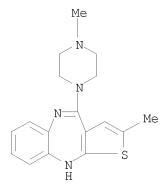


●2 H₂O

RN 928835-85-2 HCAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,
2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:?) (CA INDEX NAME)

●x H2O

IT 132539-06-1P, Olanzapine
 RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);
 BIOL (Biological study); PREP (Preparation); USES (Uses)
 (process for producing pure and stable form of
 2-Me-4-(4-Me-1-piperazinyl)-10h-thieno[2,3-b] [1,5]benzodiazepine)
RN 132539-06-1 HCAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl) (CA INDEX NAME)



REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 17 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:1029262 HCAPLUS

DOCUMENT NUMBER: 147:427372

TITLE: Method for preparation of Olanzapine

crystal form I

INVENTOR(S): Wang, Peng; Gan, Lixin

PATENT ASSIGNEE(S): Zhejiang Huahai Pharmaceutical Co., Ltd., Peop. Rep.

China

SOURCE: Faming Zhuanli Shenging Gongkai Shuomingshu, 12pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE			
CN 101033232	A	20070912	CN 2007-10067892	20070330			
PRIORITY APPLN. INFO.:			CN 2007-10067892	20070330			

PRIORITY APPLN. INFO.:

Olanzapine crystal form I was prepared from crude
Olanzapine, dissolving in organic solvent and decoloring with active carbon to obtain high purity Olanzapine (HPLC greater than 99.5%), after that redissolving in methylene chloride, filtering, and spray-drying to get solid crystal. The organic solvent is C1-7 alc., C3-7 ketone, C3-7 ester, or C3-7 ether, or mixed solvent of chloroform, acetonitrile, and two or more of the above solvents in a random ratio. The X-ray powder diffraction spectrum of Olanzapine crystal form I under Cu-Ka radiation and IR absorption spectrum measured by KBr pressed disk method are characterized. The method has the advantages of high yield (greater than 90%), high product purity, and low cost.

IT 132539-06-1P, Olanzapine

RL: PRP (Properties); PUR (Purification or recovery); PREP (Preparation) (preparation of Olanzapine crystal form I)

RN 132539-06-1 HCAPLUS

L27 ANSWER 18 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

2007:963766 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 147:308040

TITLE: Preparation of anhydrous olanzapine form I INVENTOR(S): Alla, Venkat Reddy; Vyakaranam, Kameswara Rao; Sirigiri, Aruna Kumari; Bodapati, Srinivas Reddy;

Billa, Ranadheer Reddy

PATENT ASSIGNEE(S): Lee Pharma Limited, India SOURCE: PCT Int. Appl., 20pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.					KIND DATE			APPLICATION NO.						DATE		
	WO 2007096895			A1 20070830			WO 2006-IN130					20060417					
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		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KN,	KP,	KR,
		KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
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		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,
		GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
		KG,	KΖ,	MD,	RU,	ТJ,	TM										
• • • • • • • • • • • • • • • • • • • •						A 20071123 IN 2006-CH328							20060227				
PRIO	RITY AP	PLN.	INFO	.:						IN 2	006-	CH32	8		A 2	0060	227
AB	A prod	uct o	f an	hydr	ous	olar	zapi	ne o	f Fo	rm I	as	char	acte:	rize	d and	d	
	descri			_			_										
	spectr		-		-		_			•	ŕ		ŕ				
ΙT	132539	_	_	anza	pine												

132539-06-1, Olanzapine

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES

(preparation of anhydrous olanzapine form I)

RN 132539-06-1 HCAPLUS

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L27 ANSWER 19 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN
                         2007:819070 HCAPLUS
ACCESSION NUMBER:
                         147:197377
DOCUMENT NUMBER:
                         Novel polymorph E of olanzapine
TITLE:
                         and preparation of anhydrous non-solvated
                         crystalline polymorphic form I of
                          2-methyl-4(4-methyl-1-piperazinyl)-10h-thieno[2,3-
                         b][1,5] benzodiazepine (olanzapine form i)
                          from the polymorphic olanzapine
                          form e
INVENTOR(S):
                         Ray, Anup Kumar; V. Patel, Hiren Kumar; Ludescher,
                         Johannes; Patel, Mahendra R.
PATENT ASSIGNEE(S):
                         USA
                         U.S. Pat. Appl. Publ., 13pp.
SOURCE:
                         CODEN: USXXCO
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                           APPLICATION NO.
     PATENT NO.
                        KIND DATE
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                                _____
                                             _____
                                           US 2006-340284
                         A1
     US 20070173496
                                20070726
                                                                     20060126
                         A2
     WO 2007087555
                                20070802
                                            WO 2007-US60958
     WO 2007087555
                         А3
                                20071025
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK,
             MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO,
             RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT,
             TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
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             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
PRIORITY APPLN. INFO.:
                                             US 2006-340284 A 20060126
AΒ
     The invention provides an Olanzapine pseudopolymoph Form E. The
     invention provides methods of preparing polymorphic
     Olanzapine Form E employing rapid crystallization and seeding.
     The invention provides methods of preparing anhydrous Olanzapine Form
     I from the Olanzapine Form E by step-wise drying.
     132539-06-1P, Olanzapine
ΤТ
     RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (polymorph E of olanzapine and preparation of anhydrous
        non-solvated crystalline polymorphic form I of
        2-\text{methyl}-4(4-\text{methyl}-1-\text{piperazinyl})-10\text{h-thieno}[2,3-\text{b}][1,5]
        benzodiazepine (olanzapine form I) from polymorphic
        olanzapine form E)
     132539-06-1 HCAPLUS
RN
     10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
CN
       (CA INDEX NAME)
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L27 ANSWER 20 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:728826 HCAPLUS

DOCUMENT NUMBER: 147:125589

TITLE: Oral formulation of anhydrous olanzapine

form I

INVENTOR(S): Diez Martin, Ignacio; Ubeda Perez, Carmen; Pablo Alba,

Pablo

PATENT ASSIGNEE(S): Laboratorios Lesvi, S.L., Spain

SOURCE: PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.				KIN	D	DATE		APPLICATION NO.					DATE			
WO	2007	0741	10		A1	_	2007	0705		 WO 2	 006-:	EP69	905		2	0061	219
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		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
		GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KN,
		KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,
		MN,	MW,	MX,	MY,	ΜZ,	NA,	NG,	NΙ,	NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,
		RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ТJ,	TM,	TN,	TR,	TT,
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		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG,	BW,	GH,
		GM,	ΚE,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	KΖ,	MD,	RU,	ΤJ,	$_{ m TM}$										
ES	2279	715			A1		2007	0816		ES 2	005-	3183			2	0051	226
ES	2279	715			В1		2008	0601									
EP	1965	773			A1		2008	0910		EP 2	006-	8414	51		2	0061	219
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		ΒA,	HR,	MK,	RS												
JP	2009	5215	18		Τ		2009	0604		JP 2	008-	5479	47		2	0061	219
US	2008	0311	203		A1		2008	1218		US 2	-800	1590.	30		2	0800	624
KR	2008	0802	30		Α		2008	0902		KR 2	-800	7183	44		2	0800	725
IORIT	Y APP	LN.	INFO	.:						ES 2	005-	3183		Ž	A 2	0051	226
										US 2	005-	7541	04P]	P 2	0051	227
										WO 2	006-	EP69				0061	219
				- ·					_		_			7			

AB The invention relates to a solid formulation for the oral administration of olanzapine that comprises a core of anhydrous olanzapine Form I or a pharmaceutically acceptable salt thereof and, optionally, pharmaceutically acceptable excipients, said core being coated with a functional polymer that acts as film-forming agent. The method for obtaining it comprises: i) providing anhydrous olanzapine Form I or a salt thereof and, optionally, pharmaceutically acceptable excipients in solid form; ii) providing a functional polymer that acts as film former; iii) preparing a dispersion of said functional polymer in an aqueous medium,-

and

applying the dispersion obtained in step iii) onto the solid form of step i). A composition contains olanzapine form I, lactose monohydrate, microcryst. cellulose, low-substituted, hydropropyl cellulose, Crospovidone, anhydrous colloidal silica, and Mg stearate.

IT 132539-06-1, Olanzapine

RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (oral formulation of anhydrous olanzapine form I)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 21 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:531306 HCAPLUS

DOCUMENT NUMBER: 148:483731

TITLE: Crystal structure of olanzapinium

benzoate (1:1)

AUTHOR(S): Sridhar, B.; Ravikumar, K.

CORPORATE SOURCE: Laboratory of X-ray Crystallography, Indian Institute

of Chemical Technology, Hyderabad, 500007, India

SOURCE: Journal of Structural Chemistry (2007), 48(1), 198-202

CODEN: JSTCAM; ISSN: 0022-4766

PUBLISHER: Springer
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Olanzapinium benzoate,

1-methyl-4-(2-methyl-10H-thieno[2,3-b][1,5]benzodiazepin-4-yl)-piperazin-1-ium benzoate, (C17H21N4S)+(C7H5O2)- (I), crystallizes in triclinic space group P.hivin.1 with a 9.2957(6), b 11.2416(7), c 12.0003(8) Å; α 64.585(1), β 87.568(1), γ 83.248(1)°.

Crystallog. data and atomic coordinates are given. The asym. part of the structure comprises a singly charged olanzapinium cation and a singly charged benzoate anion. The central 1,5-diazepine ring adopts the expected boat conformation, while the piperazine ring favors the chair conformation. The olanzapinium and benzoate ions are linked by intermol. N-H...O H bonds forming infinite chains running along the c-axis of the crystal.

IT 861390-70-7, Olanzapinium benzoate

RL: PRP (Properties)

(crystal structure of)

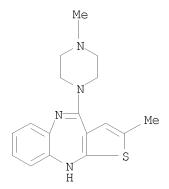
RN 861390-70-7 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine,

2-methyl-4-(4-methyl-1-piperazinyl)-, benzoate (1:1) (CA INDEX NAME)

CM 1

CRN 132539-06-1 CMF C17 H20 N4 S



CM 2

CRN 65-85-0 CMF C7 H6 O2

REFERENCE COUNT:

16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 22 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:286797 HCAPLUS

DOCUMENT NUMBER: 146:323378

TITLE: Pharmaceutical co-crystal compositions of

drugs

INVENTOR(S): Almarsson, Oern; Bourghol Hickey, Magali; Peterson,

Matthew; Zaworotko, Michael J.; Moulton, Brian;

Rodriguez-Hornedo, Nair

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 92pp., Cont.-in-part of U.S.

Ser. No. 601,092.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 18

PATENT INFORMATION:

PAT	TENT	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D.	ATE	
US	2007	0059	 356		 A1	_	2007	0315		 US 2	005-	 5469	 63		2	0050	826
WO	2003	0744	74		A2		2003	0912		WO 2	003-	US66	62		2	0030	303
WO	2003	0744	74		А3		2003	1218									
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US	2004			- ,	A1	•	2004				003-			,		0030	
US	7078				В2		2006										
WO	2004		84		A1		2003			WO 2	003-	US19	574		2	0030	620
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US	2005	0025	791		A1		2005	0203		US 2	003-	6010	92		2	0030	620
WO	2004	0781	61		A1		2004	0916		WO 2	003-	US27	772		2	0030	904
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20040722
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              GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
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              NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,
              TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
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              BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
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                                               WO 2004-US400
     WO 2004063152
                            A2
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                            АЗ
                                   20041111
              AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
          W:
              CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
              GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
              LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ
     WO 2004078163
                                   20040916
                                               WO 2004-US6288
                                                                          20040226
                            Α2
     WO 2004078163
                            А3
                                   20050120
              AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
              CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI
          RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,
              MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
              GQ, GW, ML, MR, NE, SN, TD, TG
     US 20060140985
                          A1
                                   20060629
                                                US 2005-541703
                                                                          20050708
PRIORITY APPLN. INFO.:
                                                US 2002-384152P
                                                                      Ρ
                                                                          20020531
                                                US 2002-390881P
                                                                      Ρ
                                                                          20020621
                                                US 2002-426275P
                                                                      Ρ
                                                                          20021114
                                                US 2002-427086P
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                                                                          20021115
                                                US 2002-429515P
                                                                      Ρ
                                                                          20021126
                                                US 2002-437516P
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                                                                          20021230
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                                                US 2003-439282P
                                                                          20030110
                                                US 2003-444315P
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                                                                          20030131
                                                US 2003-451213P
                                                                      Ρ
                                                                          20030228
                                                WO 2003-US6662
                                                                         20030303
                                                                      Α
                                                US 2003-456027P
                                                                      Ρ
                                                                          20030318
                                                US 2003-463962P
                                                                      Ρ
                                                                         20030418
                                                US 2003-449307
                                                                      A2 20030530
                                                US 2003-601092
                                                                      A2 20030620
                                                                      A 20030620
                                                WO 2003-US19574
                                                WO 2003-US27772
                                                                          20030904
                                                                      Α
                                                WO 2003-US41273
                                                                          20031224
                                                                      Α
                                                WO 2004-US6288
                                                                          20040226
                                                                      W
                                                US 2002-360768P
                                                                      Ρ
                                                                          20020301
                                                US 2003-439283P
                                                                      Ρ
                                                                          20030110
                                                US 2003-441335P
                                                                      Ρ
                                                                          20030121
                                                US 2003-378956
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                                                                          20030303
                                                US 2003-456608P
                                                                      Ρ
                                                                          20030321
                                                US 2003-459501P
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                                                                          20030401
                                                US 2003-486713P
                                                                      Ρ
                                                                          20030711
                                                US 2003-487064P
                                                                      Ρ
                                                                          20030711
                                                US 2003-637829
                                                                      Α
                                                                          20030808
                                                US 2003-660202
                                                                     A2 20030911
                                                WO 2003-US28982
                                                                     A2 20030916
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US 2003-508208P P 20031002 WO 2004-US400 W 20040108 US 2004-542752P P 20040206

AB A pharmaceutical composition comprises a co-crystal of an active pharmaceutical ingredient (API) and a co-crystal former; wherein the API has at least one functional group, e.g., ether, alc., acid, amide, hyterocyclic ring, etc., such that the API and co-crystal former are capable of co-crystallizing from a solution phase under crystallization conditions. Example cocrystals prepared are 1:1 celecoxib-nicotinamide and celecoxib-18-crown-6. Dissoln. was determined for a number of cocrystals. Also data for H-bonding functional groups with compds. such as amines, amides, and alcs. were given.

IT 922167-04-2P 929024-70-4P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (pharmaceutical co-crystal compns. of drugs)

RN 922167-04-2 HCAPLUS

CN 3-Pyridinecarboxamide, compd. with 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (1:1) (CA INDEX NAME)

CM 1

CRN 132539-06-1 CMF C17 H20 N4 S

CM 2

CRN 98-92-0 CMF C6 H6 N2 O

RN 929024-70-4 HCAPLUS

CN 3-Pyridinecarboxamide, compd. with 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (2:1) (CA INDEX NAME)

CM 1

CRN 132539-06-1 CMF C17 H20 N4 S

CM 2

CRN 98-92-0 CMF C6 H6 N2 O

L27 ANSWER 23 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:265980 HCAPLUS

DOCUMENT NUMBER: 146:448301

TITLE: Synergistic pharmaceutical compositions containing

olanzapine and analgetic drugs

INVENTOR(S): Shannon, Harlan E.; Womer, Daniel E.

PATENT ASSIGNEE(S): Eli Lilly and Co., USA SOURCE: Hung. Pat. Appl., 38 pp.

CODEN: HUXXCV

DOCUMENT TYPE: Patent LANGUAGE: Hungarian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ни 9903375	A2	20000228	ни 1999-3375	19970324
ни 9903375	A 3	20000428		

PRIORITY APPLN. INFO.:

AB The subject of the invention is a pharmaceutical product, which contains olanzapine or its medically acceptable salt and one or more pain relieving active ingredients. The product according to the invention has a synergetic effect. Thus tablets were prepared from a composition (weight

a synergetic effect. Thus tablets were prepared from a composition (weight parts):

hydroxypropyl cellulose 4.0; olanzapine 1.18; ibuprofen 3.0; lactose 79.32; Crospovidon 5; cellulose 10; magnesium stearate 0.5. The tablets were coated with a mixture of hydroxypropyl methylcellulose, polyethylene glycol, polysorbat 80 and titania.

IT 132539-06-1, Olanzapine

RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(synergistic pharmaceutical compns. containing olanzapine and analgetic drugs)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

IT 132539-06-1D, Olanzapine, salts, solvates

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(synergistic pharmaceutical compns. containing olanzapine and analgetic drugs) $\,$

RN 132539-06-1 HCAPLUS CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

L27 ANSWER 24 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:254444 HCAPLUS

DOCUMENT NUMBER: 148:61904

TITLE: Crystalline form I of

2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine

INVENTOR(S): Chhanga, Chhabada Vijay; Budhdev, Rehani Rajeev;

Rajamamannar, Thennati

PATENT ASSIGNEE(S): Sun Pharmaceutical Industries Ltd., India

SOURCE: Indian Pat. Appl., 30pp.

CODEN: INXXBQ

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IN 2001MU01210	A	20050304	IN 2001-MU1210	20011224
PRIORITY APPLN. INFO.:			IN 2001-MU1210	20011224

AB Crystalline form I of 2-methyl-4-(4-methyl-1-piperazinyl)-10Hthieno[2,3-b][1,5]benzodiazepine(olanzapine) is characterized by
x-ray powder diffraction and IR spectroscopy. Its color is stable under
ambient conditions of storage; and the process of its preparation comprises 2
repetitive steps of crystallization from organic solvents by dissolving the
in the solvents and allowing crystallization to occur, wherein in 1 step
the solution is purified by treating with a solid absorbent material and
filtering, and wherein in the last step the crystalline material is
subjected to drying.

IT 132539-06-1P, Olanzapine

RL: PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(crystalline form I of

methyl (methylpiperazinyl) thienobenzodiazepine)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

L27 ANSWER 25 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

(process for making olanzapine Form I)

132539-06-1 HCAPLUS

(CA INDEX NAME)

ACCESSION NUMBER: 2007:197406 HCAPLUS

DOCUMENT NUMBER: 146:236152

TITLE: A process for making olanzapine Form I

INVENTOR(S): Keltjens, Rolf
PATENT ASSIGNEE(S): Synthon B. V., Neth.
SOURCE: PCT Int. Appl., 23pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.					KIND DATE				APPLICATION NO.					DATE			
	WO	2007	0200	80		A1		2007	0222	,	WO 2	006-	EP80	96		2	0060	816
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
								DE,										
			GE,	GH,	GM,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,	KP,
			KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,
			MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RS,
			RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,
			UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW								
		RW:						CZ,										
								MC,										
								GN,										
								NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	AZ,	BY,
				KΖ,	MD,													
	EP	1919						2008									0060	
		R:						CZ,										
							LU,	LV,	MC,	ΝL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	AL,
	TIC	2007		HR,				2007	0222		110 0	000	1 C E 1	2.0		2	0000	017
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		erap		_		_		_			-	_				_		

 $10 \\ H-Thieno [2,3-b] [1,5] \\ benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-10 \\ H-Thieno [2,3-b] [1,5-b] \\ benzodiazepine, 3-methyl-4-(4-methyl-1-piperazinyl)-10 \\ H-Thieno [2,3-b] \\ benzodiazepine, 3-methyl-4-(4-methyl-1-p$

RN

CN

CMF C17 H20 N4 S

CM 2

CRN 65-85-0

CMF C7 H6 O2

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 26 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:181484 HCAPLUS

DOCUMENT NUMBER: 146:365595

TITLE: Oral olanzapine tablet formulations with coating containing polyethylene glycol

INVENTOR(S): Reddy, Pallempalli Venkata Siva; Reddy, Billa Praveen;

Mohan, Mailatur Sivaraman

PATENT ASSIGNEE(S): Dr. Reddy's Laboratories Ltd., India

SOURCE: Indian Pat. Appl., 14pp.

CODEN: INXXBQ

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IN 2002MA00235	А	20050304	IN 2002-MA235	20020401
PRIORITY APPLN. INFO.:			IN 2002-MA235	20020401

AB The present invention is directed towards the oral tablet dosage form of olanzapine consisting essentially of the polyethylene glycol coating applied directly on the core tablet containing olanzapine Form I polymorph as active ingredient. The coated tables of olanzapine prepared in accordance with the present invention have acceptable stability as per ICH guidelines and are bioequivalent to the com. available Zyprexa tablets.

IT 132539-06-1, Olanzapine

RL: PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(oral olanzapine tablet formulations with coating containing polyethylene glycol)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

L27 ANSWER 27 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:181193 HCAPLUS

DOCUMENT NUMBER: 146:358886

TITLE: Novel olanzapine monohydrate-I and

a process for preparation thereof
INVENTOR(S): Reguri, Buchi Reddy; Chakka, Ramesh
PATENT ASSIGNEE(S): Dr. Reddy's Laboratories Ltd., India

SOURCE: Indian Pat. Appl., 18pp.

CODEN: INXXBQ

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IN 2002MA00154	A	20050304	IN 2002-MA154	20020228
PRIORITY APPLN. INFO.:			IN 2002-MA154	20020228

OTHER SOURCE(S): CASREACT 146:358886

AB The invention is directed to Olanzapine monohydrate-I.

The invention further provides a process for the preparation of Olanzapine monohydrate-I, which is a com. viable process

and well suited for industrial scale up. Olanzapine

monohydrate was prepared by amination of

 $4-a \texttt{mino}-2-\texttt{methyl}-10 \texttt{H}-\texttt{thieno} \texttt{[2,3-b]} \texttt{[1,5]} \texttt{benzodiazepine} \ \texttt{hydrochloride} \ \texttt{with}$

N-methylpiperazine. The crystal structure of Olanzapine

monohydrate was also determined

IT 402586-77-0P

RL: IMF (Industrial manufacture); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

(preparation and crystal structure of olanzapine

monohydrate via amination of amino(methyl)thienobenzodiazepine

hydrochloride with methylpiperazine)

RN 402586-77-0 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine,

2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:1) (CA INDEX NAME)

● H2O

L27 ANSWER 28 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:181157 HCAPLUS

DOCUMENT NUMBER: 146:507560

TITLE: Hydrated form of olanzapine and process for

preparation thereof

INVENTOR(S): Reguri, Buchi Reddy; Chakka, Ramesh PATENT ASSIGNEE(S): Dr. Reddy's Laboratories Ltd., India

SOURCE: Indian Pat. Appl., 18pp.

CODEN: INXXBQ

DOCUMENT TYPE: Patent LANGUAGE: English

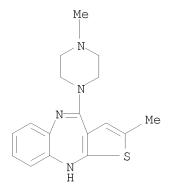
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PRIC	IN 2002MA00496 PRITY APPLN. INFO.:	A	20050304	IN 2002-MA496 IN 2002-MA496	20020701 20020701
AB				s to provide the novel	cryst
	. forms of olanzapi	ne mond	phydrate. Th	ne present	
	invention also prov	rides a	process for	the preparation of nove	el
	olanzapine monohydr	ate. 1	The process i	for the preparation of	
	these hydrated form	s compr	rises the dis	ssoln. of crystalline Fo	orm of
	olanzapine in a mix	ture of	water and a	an alc. using trifluoro	acetic
	-			the mass towards basic	
			-	olanzapine. The present	
		-		ell suited for industria	
ΙT	132539-06-1, Olanza				
	· · · · · · · · · · · · · · · · · · ·	-	(Reactant).	THU (Therapeutic use);	RTOI.
				reagent) · HSES (Hses)	DIOI

(Biological study); RACT (Reactant or reagent); USES (Uses)
(hydrated form of olanzapine and process for preparation thereof)
RN 132539-06-1 HCAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-

(CA INDEX NAME)



● H2O

L27 ANSWER 29 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:181154 HCAPLUS

DOCUMENT NUMBER: 146:365589

TITLE: A process for the preparation of olanzapine

dihydrate

INVENTOR(S): Reguri, Buchi Reddy; Chakka, Ramesh PATENT ASSIGNEE(S): Dr. Reddy's Laboratories, India

SOURCE: Indian Pat. Appl., 19pp.

CODEN: INXXBQ

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	IN 2001MA00738	A	20050304	IN 2001-MA738	20010906
PRIO	RITY APPLN. INFO.:			IN 2001-MA738	20010906
AB	The present invention	on rela	tes to a simp	ple method for convers	sion of
	olanzapine dehydrate	e to ola	anzapine Forr	m 1 by recrystn.	
	of olanzanine dihyd	rato in	dichlorometh	hane The	

olanzapine dehydrate to olanzapine Form 1 by recrystn.
of olanzapine dihydrate in dichloromethane. The
process adopted herein is com. viable and well suited for industrial scale
up. Olanzapine dihydrate was prepared by the reaction

of olanzamine with N-methylpiperazine and the product was characterized by x-ray crystallog.

IT 205485-16-1P, Olanzapine dihydrate

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(process for preparation of olanzapine dihydrate)

RN 205485-16-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine,

2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:2) (CA INDEX NAME)

●2 H2O

IT 132539-06-1, Olanzapine

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (process for preparation of olanzapine dihydrate)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

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L27 ANSWER 30 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN
                         2007:159389 HCAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         146:316350
TITLE:
                         Crystal structure of olanzapine and its
                         solvates. Part 3. Two and three-component solvates
                         with water, ethanol, butan-2-ol and dichloromethane
AUTHOR(S):
                         Wawrzycka-Gorczyca, Irena; Borowski, Piotr;
                         Osypiuk-Tomasik, Joanna; Mazur, Liliana; Koziol, Anna
CORPORATE SOURCE:
                         Faculty of Chemistry, Department of Crystallography,
                         Maria Curie-Sklodowska University, Lublin, 20-031,
                         Pol.
                         Journal of Molecular Structure (2007), 830(1-3),
SOURCE:
                         188-197
                         CODEN: JMOSB4; ISSN: 0022-2860
PUBLISHER:
                         Elsevier B.V.
DOCUMENT TYPE:
                         Journal
                         English
LANGUAGE:
     Crystalline solvates of olanzapine (1),
     2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine,
     have been characterized by an X-ray anal. and thermal (DSC) data.
Crystallization
     of 1 from ethanol gives a solid containing both water and ethanol mols.; the
     solvate 1.H2O.EtOH (2:2:1) is monoclinic with the space
     group P21/c and the unit-cell volume V = 3752.8(12) \text{ Å}3. Butan-2-ol
     forms with 1 solvate which is also a three-component phase,
     1.H2O.BuOH, but its stoichiometry is different (1:1:1). The
     space group for this crystal is P21/c and the unit-cell volume V = 2216.5(7)
     Å3. Crystalline olanzapine dichloromethane solvate (2:1),
     1. CH2Cl2, is triclinic with the space group P.hivin.1. The
     characteristic feature of all crystal structures is presence of a pair of
     olanzapine mols. which form dimer stabilized by multiple weak
     C-H\cdots\pi interactions between the
    N-methylpiperazine fragment and the Ph / thiophene systems. Theor.
     calcns. have been performed indicating that the total
     C-H\cdots\pi binding energy is about 8 kcal mol-1. In
     the crystal structure, the self-assembled olanzapine mol. dimers
     are arranged into parallel crystal planes. Packing of the layers proceeds
     in two ways in which structural motives are replicated by (i)
     perpendicular translation forming columns, and (ii) rotation around the
    twofold screw axis (parallel to the layer).
TT
    647826-03-7
                   928835-79-4
                                     928835-81-8
    RL: PEP (Physical, engineering or chemical process); PRP (Properties);
     PROC (Process)
        (crystallog. and thermal desolvation; crystal
        structure olanzapine two- and three-component
        solvates with water, ethanol, butan-2-ol and dichloromethane)
     647826-03-7 HCAPLUS
RN
CN
     10H-Thieno[2,3-b][1,5]benzodiazepine,
     2-methyl-4-(4-methyl-1-piperazinyl)-, dichloromethane (2:1) (CA INDEX
     NAME)
     CM
          1
     CRN 132539-06-1
     CMF C17 H20 N4 S
```

CM 2

CRN 75-09-2 CMF C H2 C12

${\tt Cl-CH_2-Cl}$

RN 928835-79-4 HCAPLUS

CN Ethanol, compd. with 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine, hydrate (1:2:2) (CA INDEX NAME)

CM 1

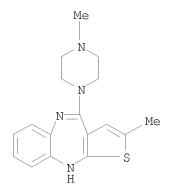
CRN 132539-06-1 CMF C17 H20 N4 S

CM 2

CRN 64-17-5 CMF C2 H6 O

```
H<sub>3</sub>C-СH<sub>2</sub>-ОН
     928835-81-8 HCAPLUS
RN
     2-Butanol, compd. with 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-
CN
     b][1,5]benzodiazepine, hydrate (1:1:1) (CA INDEX NAME)
     CM
          1
     CRN 132539-06-1
     CMF C17 H20 N4 S
       Me
     N^{-}
                 Ме
       Η
     CM
          2
     CRN 78-92-2
          C4 H10 O
     CMF
    ОН
H3C-CH-CH2-CH3
ΙT
     928835-85-2
     RL: PRP (Properties)
        (crystallog.; crystal structure olanzapine
        two- and three-component solvates with water, ethanol, butan-2-ol and
        dichloromethane)
     928835-85-2 HCAPLUS
RN
     10H-Thieno[2,3-b][1,5]benzodiazepine,
CN
     2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:?) (CA INDEX NAME)
```

●x H2O



CM 2

CRN 67-56-1

CMF C H4 O

 $_{
m H3C-OH}$

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 31 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:127685 HCAPLUS

DOCUMENT NUMBER: 146:280565

TITLE: Quantification of olanzapine

polymorphs using powder X-ray diffraction

technique

AUTHOR(S): Tiwari, Manisha; Chawla, Garima; Bansal, Arvind K.

CORPORATE SOURCE: Department of Pharmaceutical Technology

(Formulations), National Institute of Pharmaceutical Education and Research (NIPER), SAS Nagar, Punjab,

160062, India

SOURCE: Journal of Pharmaceutical and Biomedical Analysis

(2007), 43(3), 865-872

CODEN: JPBADA; ISSN: 0731-7085

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

Accurate quantification of crystalline phases present in drug materials is becoming increasingly important, due to stringent regulatory concerns about polymorph characterization and control in drug substances and products. In the present study, a quantification method for polymorphic forms of olanzapine has been developed using powder x-ray diffraction (PXRD). Preferred orientation has been reported to be the major source of error in PXRD anal., therefore, prior to development of a quantification method, pure polymorphic forms (I and II) of different size ranges were analyzed. Preferred orientation effect was found to decrease on using sieve fraction BSS # 120/240 for form I. In order to obtain good peak resolution in optimum time, the step time and step size were varied so as to optimize the scan rate. Among the five combinations selected, step size of 0.05° with step time of 5 s demonstrated identification of four characteristic peaks of form I in form II in 62 min. A calibration curve was constructed in the range of 0-100% (weight/weight) using the characteristic peak of form I at $18.48^{\circ}~2\Theta$ (I/I0 78.8%). The PXRD assay was reproducible and precise and displayed a LOD of 0.40% (weight/weight) and LOQ of 1.22% (weight/weight).

Validation results showed excellent correlation between actual and predicted concns. with R2 0.9999.

IT 132539-06-1, Olanzapine

RL: ANT (Analyte); PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses)

(olanzapine polymorphs quantification using powder

x-ray diffraction)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 32 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:119077 HCAPLUS

DOCUMENT NUMBER: 146:212835

TITLE: Pharmaceutical co-crystal compositions

INVENTOR(S): Almarsson, Orn; Bourghol Hickey, Magali; Peterson, Matthew L.; Zaworotko, Michael J.; Moulton, Brian;

Rodriguez-Hornedo, Nair

PATENT ASSIGNEE(S): Transform Pharmaceuticals, Inc., USA; University of

South Florida; The Regents of the University of

Michigan

SOURCE: U.S. Pat. Appl. Publ., 102 pp., Cont.-in-part of Appl.

No. PCT/US03/27772.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 18

PATENT INFORMATION:

PATENT NO.	KIND DAT	TE APPL	ICATION NO.	DATE
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US 6559293	B1 200)30506 US 2	002-232589	20020903
US 20030166581	A1 200)30904 US 2	002-295995	20021118
US 6699840	B2 200	040302		
US 20030224006	A1 200)31204 US 2	003-378956	20030303
US 20040019211	A1 200)40129 US 2	003-449307	20030530
118 /11 /85 /6	B / / / / / /	060718		
US 20050025791	A1 200		003-601092	20030620
US 20040053853)40318 US 2	003-637829	20030808
WO 2004078161	A1 200)40916 WO 2	003-US27772	20030904
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				DE, DK, EE, ES,
				SE, SI, SK, TR,
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EP 1579198	111 201			20031224
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20070118
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WO 2005023198
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BR 2004013777
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JP 2007513867 ZA 2004007377 US 20060134198 US 20060140985 US 20060223794 NO 2006000669 IN 2006KN00371 MX 2006002507 KR 2006128831 US 20070021510 US 7566805	T A A1 A1 A A A A A1 B2	20070531 20051004 20060622 20060629 20061005 20060602 20070622 20060620 20061214 20070125 20090728	JP 2006-525508 2004090 ZA 2004-7377 2004091 US 2005-541216 2005062 US 2005-551014 2005092 NO 2006-669 2006021 IN 2006-KN371 2006022 MX 2006-2507 2006030 KR 2006-704425 2006030 US 2006-570405 2006030	A 2004-7377 S 2005-541216 S 2005-541703 S 2005-551014 C 2006-669 N 2006-KN371 X 2006-2507 R 2006-704425	914 629 708 929 210 220 302 303
US 20090088443 PRIORITY APPLN. INFO.:	A1	20090402	US 2008-234420 US 2002-356764P US 2002-360768P US 2002-380288P US 2002-384152P US 2002-384152P US 2002-232589 US 2002-295995 US 2002-295995 US 2003-439282P US 2003-444315P US 2003-444315P US 2003-4451213P US 2003-449307 US 2003-463962P US 2003-463962P US 2003-4747742 US 2002-426275P US 2002-428515P US 2002-429515P US 2003-4437516P US 2003-4437516P US 2003-4437516P US 2002-429515P US 2003-439283P US 2003-456602 US 2003-456602P US 2003-456027P US 2003-456027P US 2003-456602P US 2003-456027P US 2003-456020P	S 2002-356764P S 2002-360768P S 2002-380288P S 2002-384152P S 2002-406974P S 2002-232589 S 2003-439282P S 2003-444315P S 2003-451213P S 2003-451213P S 2003-463962P S 2003-463962P S 2003-463962P S 2003-47772 S 2002-390881P S 2002-426275P S 2002-427086P S 2002-427086P S 2002-428515P S 2002-427086P S 2002-427086P S 2002-428515P S 2002-427086P S 2002-427086P S 2003-45602P S 2003-456608P	215 301 515 531 830 118 903 118 131 830 131 830 131 830 131 830 141 152 126 121 130 131 131 131 131 131 131 131 131 13

US 2004-560411P Р 20040406 US 2004-573412P Ρ 20040521 US 2004-579176P Ρ 20040612 US 2004-581992P Ρ 20040622 Р US 2004-586752P 20040709 US 2004-588236P Ρ 20040715 US 2004-590590P P 20040723 US 2004-926842 A3 20040826 WO 2004-US29013

A pharmaceutical composition comprising a co-crystal of an active pharmaceutical ingredient (API) and a co-crystal former; wherein the API has at least one functional group selected from ether, thioether, alc., thiol, aldehyde, ketone, thioketone, nitrate ester, phosphate ester, thiophosphate ester, ester, thioester, sulfate ester, carboxylic acid, phosphonic acid, phosphinic acid, sulfonic acid, amide, primary amine, secondary amine, ammonia, tertiary amine, thiocyanate, cyanamide, oxime, nitrile diazo, organo-halide, nitro, s-heterocyclic ring, thiophene, N-heterocyclic ring, pyrrole, O-heterocyclic ring, furan, epoxide, peroxide, hydroxamic acid, imidazole, pyridine and the co-crystal former has at least one functional group selected from amine, amide, pyridine, imidazole, indole, pyrrolidine, carbonyl, carboxyl, hydroxyl, phenol, sulfone, sulfonyl, mercapto and Me thio, such that the API and cocrystal former are capable of co-crystallizing from a solution phase under crystallization conditions. Thus, 1:1 celecoxib: nicotinamide co-crystals were prepared by reacting celecoxib and nicotinamide in acetone solution

922167-04-2P ΙT 756835-49-1P

> RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(pharmaceutical co-crystal compns.)

RN 756835-49-1 HCAPLUS

CN 3-Pyridinecarboxamide, compd. with

> 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine(1:?) (CA INDEX NAME)

CM 1

CRN 132539-06-1 CMF C17 H20 N4 S

CM2

CRN 98-92-0 CMF C6 H6 N2 O

RN 922167-04-2 HCAPLUS

CN 3-Pyridinecarboxamide, compd. with 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (1:1) (CA INDEX NAME)

CM 1

CRN 132539-06-1 CMF C17 H20 N4 S

CM 2

CRN 98-92-0 CMF C6 H6 N2 O

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L27 ANSWER 33 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN 2007:90732 HCAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 146:169386 A process and composition for making TITLE: olanzapine form I INVENTOR(S): Keltjens, Rolf; Thijs, Lambertus PATENT ASSIGNEE(S): Synthon B.V., Neth. PCT Int. Appl., 18pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. APPLICATION NO. KIND DATE _____ ____ 20070125 WO 2006-EP7138 WO 2007009788 A1

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               KG, KZ, MD, RU, TJ, TM
      US 20070021605
                             A1 20070125
                                                   US 2006-458513
                                                                                20060719
                                                    US 2005-700717P
PRIORITY APPLN. INFO.:
                                                                            P 20050720
      The invention relates to a process for making crystalline
      olanzapine Form (I), which comprises reducing the pressure of a
      gas/supercrit. fluid composition comprising carbon dioxide and
      olanzapine to precipitate crystalline olanzapine form (I)
      from the composition
ΙT
      132539-06-1, Olanzapine
      RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU
      (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
          (process and composition for making olanzapine form I)
RN
      132539-06-1 HCAPLUS
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10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-

CN

(CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 34 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:1162271 HCAPLUS

DOCUMENT NUMBER: 146:32633

TITLE: Solid state characterization of olanzapine polymorphs using vibrational spectroscopy

AUTHOR(S): Ayala, A. P.; Siesler, H. W.; Boese, R.; Hoffmann, G.

G.; Polla, G. I.; Vega, D. R.

CORPORATE SOURCE: Department of Physical Chemistry, University of

Duisburg-Essen, Essen, D45117, Germany

SOURCE: International Journal of Pharmaceutics (2006),

326(1-2), 69-79

CODEN: IJPHDE; ISSN: 0378-5173

PUBLISHER: Elsevier Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

AB FT-Raman, IR and near IR investigations of 2 polymorphs of olanzapine are presented, establishing the main features that

allow the discrimination of these crystalline forms using vibrational

spectroscopic methods. Ab initio calcns. on the basis of the d.

functional theory were used to determine the stable conformations. The calculated $% \left(1\right) =\left(1\right) +\left(1\right) +$

vibrational spectra were compared to the exptl. ones to identify the conformers corresponding to each polymorph and to assign the vibrational bands to the internal vibrations of the olanzapine mol. The authors' results support the hydrogen bonding pattern proposed by the reported crystalline structure and provide valuable information on the structural and thermodynamical relationship between the investigated polymorphs.

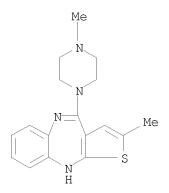
IT 132539-06-1, Olanzapine

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(solid state characterization of olanzapine polymorphs using vibrational spectroscopy)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)



OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD

(6 CITINGS)

REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 35 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2006:1005866 HCAPLUS 145:363423 DOCUMENT NUMBER: Process for preparing crystalline form I of TITLE: olanzapine INVENTOR(S): Sundaram, Venkataraman; Pandurang, Sharat Narsapur; Dayaram, Vishal Parmar; Bommareddy, Siva Kumar Reddy; Sitaram, Hitendra Chaudhary Dr. Reddy's Laboratories Ltd., India; Dr. Reddy's PATENT ASSIGNEE(S): Laboratories, Inc. SOURCE: PCT Int. Appl., 22pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION: DATE APPLICATION NO. PATENT NO. KIND DATE _____ ____ _____ A2 2006052 20070118 3TT AZ, WO 2006102176 WO 2006-US9911 20060320 WO 2006102176 А3 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM EP 2006-738901 EP 1863775 A2 20071212 20060320 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR IN 2007CN04197 A 20071123 IN 2007-CN4197 20070924 KR 2007113277 20071128 KR 2007-722692 Α 20071004 PRIORITY APPLN. INFO.: A 20050321 IN 2005-CH291 US 2005-677115P P 20050503 W 20060320 WO 2006-US9911 AB A process for preparing olanzapine Form I comprises: cooling a concentrated solution of olanzapine; isolating wet crystals of olanzapine Form I; and drying wet crystals and recovering olanzapine Form I. Drying can be conducted by stepwise increases in the drying temps., with extended holding times at each temperature condition. Olanzapine monohydrate was mixed with methylene chloride and the suspension was heated to obtain a clear solution and the resultant solution was filtered through a perlite bed in a and the filtrate was vacuum distilled to give the crystalline form I of olanzapine. 132539-06-1, Olanzapine ΙT RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(process for preparing crystalline form I of olanzapine)

10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-

132539-06-1 HCAPLUS

RN

(CA INDEX NAME)

ΙT 402586-77-0 RL: RCT (Reactant); RACT (Reactant or reagent) (process for preparing crystalline form I of olanzapine) $402586 - 77 - 0 \quad \text{HCAPLUS}$

RN

10H-Thieno[2,3-b][1,5]benzodiazepine, CN 2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:1) (CA INDEX NAME)

● H2O

REFERENCE COUNT:

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS 1 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 36 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:548123 HCAPLUS

DOCUMENT NUMBER: 145:14805

TITLE: An improved process for the preparation of

polymorph form-I of olanzapine

INVENTOR(S): Giridhar, Thota; Requri, Buchi Reddy; Chakka, Ramesh

PATENT ASSIGNEE(S): Dr. Reddy's Laboratories Limited, India

SOURCE: Indian, 15 pp. CODEN: INXXAP

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IN 190857	A1	20030830	IN 2000-MA569	20000724
PRIORITY APPLN. INFO.:			IN 2000-MA569	20000724

AB The present invention is related to a method for the preparation of polymorph form-I of olanzapine by conversion of the Form II into the desired polymorph by using CH2Cl2 as the solvent. Crude olanzapine was suspended in CH2Cl2 to give a clear solution and the resultant solution was then treated with carbon followed by filtration. The product obtained on drying was the polymorph form-I of olanzapine.

IT 132539-06-1, Olanzapine

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(improved process for preparation of polymorph form-I of olanzapine)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

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L27 ANSWER 37 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2006:496099 HCAPLUS
                            144:495403
DOCUMENT NUMBER:
TITLE:
                           Injectable nanoparticulate olanzapine
                           formulations
                           Liversidge, Gary; Jenkins, Scott
INVENTOR(S):
PATENT ASSIGNEE(S):
                          Elan Pharma International Ltd., Ire.
                            PCT Int. Appl., 58 pp.
SOURCE:
                            CODEN: PIXXD2
DOCUMENT TYPE:
                            Patent
LANGUAGE:
                            English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:
                      KIND DATE
                                               APPLICATION NO.
     PATENT NO.
                                                                          DATE
                                   _____
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                                                 _____

      WO 2006055603
      A2
      20060526

      WO 2006055603
      A3
      20061130

                                               WO 2005-US41470
                                                                           20051116
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              CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YH, ZA, ZM, ZW
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                            A1 20060526
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              BA, HR, MK, YU
     CN 101106972
                         A 20070810 IN 2007-3065

A 20070801 IN 2007-313288

A 20070801 NO 2007-3065
                                    20080116
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     MX 2007005885
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     IN 2007KN01820
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NO 2007003065
                                                                            20070613
                                                                            20070615
                                                                       P 20041116
PRIORITY APPLN. INFO.:
                                                  US 2004-628748P
                                                  WO 2005-US41470 W 20051116
     Described are injectable formulations of nanoparticulate
AB
     olanzapine that produce a prolonged duration of action upon
     administration, and methods of making and using such formulations. The
     injectable formulations comprise nanoparticulate olanzapine.
     132539-06-1, Olanzapine
     RL: PEP (Physical, engineering or chemical process); PYP (Physical
     process); THU (Therapeutic use); BIOL (Biological study); PROC (Process);
     USES (Uses)
         (injectable nanoparticulate olanzapine formulations)
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10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-

132539-06-1 HCAPLUS

RN

(CA INDEX NAME)

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 38 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:360573 HCAPLUS

DOCUMENT NUMBER: 144:494987

TITLE: Anisotropic lattice contraction in pharmaceuticals:

the influence of cryo-crystallography on calculated powder diffraction patterns

AUTHOR(S): Stephenson, Gregory A.

CORPORATE SOURCE: Lilly Research Laboratories, Eli Lilly and Company,

Indianapolis, IN, 46285, USA

SOURCE: Journal of Pharmaceutical Sciences (2006), 95(4),

821-827

CODEN: JPMSAE; ISSN: 0022-3549

PUBLISHER: Wiley-Liss, Inc.

DOCUMENT TYPE: Journal LANGUAGE: English

AB The following article examines the influence of thermal expansion on X-ray powder diffraction patterns. With the increasing percentages of structures that are being solved using low-temperature data sets and the nearly exclusive collection of room-temperature exptl. datasets by X-ray powder diffraction, considerable discrepancies are observed when comparing calculated power diffraction patterns to exptl. patterns. Such comparisons are extremely valuable to solid-state pharmaceutical scientists attempting to identify crystal forms of active pharmaceutical ingredients and excipient components of formulations. In this study, fluoxetine HCl, raloxifene HCl, and olanzapine are examined and serve as practical laboratory examples. The observations are supported through anal. of data presented in the Cambridge Structural Database to help assess the extent and potential impact of this problem.

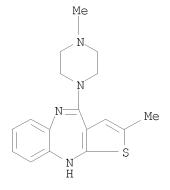
IT 132539-06-1, Olanzapine

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(influence of cryo-crystallog. on calculated powder diffraction patterns)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD

(3 CITINGS)

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 39 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

2006:269740 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 144:299489

TITLE: Processes for the preparation of olanzapine INVENTOR(S): Pandya, Bhargav R.; Aryan, Ram Chander; Kumar,

Yatendra

PATENT ASSIGNEE(S): Ranbaxy Laboratories Limited, India

SOURCE: PCT Int. Appl., 14 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.					KIND		DATE			APPL	ICAT	ION 1		DATE				
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RITY	APP	,	,	,	- ,	- ,				IN 2	004-	DE17	62		A 2	00409	917	

PRIOR

IN 2004-DE1765 A 20040917

- AΒ The invention relates to processes for the preparation of a crystalline polymorphic form of olanzapine. More particularly, it relates to the preparation of a crystalline polymorphic form of olanzapine designated as Form X and to pharmaceutical compns. that include the polymorphic Form X. The invention also relates to a process for the preparation of a methanol solvate of olanzapine and a process for using such solvate.
- ΙT 132539-06-1, Olanzapine
 - RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 - (processes for the preparation of olanzapine polymorphs)
- 132539-06-1 HCAPLUS RN
- 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-CN (CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 40 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:234837 HCAPLUS

DOCUMENT NUMBER: 144:299584

TITLE: A novel process for preparation of a pharmaceutically

pure polymorphic Form I of

olanzapine

INVENTOR(S): Muthukumaran, Ganesan; Veeramani, Kaliyappan;

Mullaiyur, Radhakrishnan Selvaraju; Porchezhiyan, Vedapuri; Kanagasalam, Selvaraj; Nazir, Kassim Khan;

Chanidran, T.

PATENT ASSIGNEE(S): Shasun Chemicals and Drugs Limited, India

SOURCE: PCT Int. Appl., 13 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

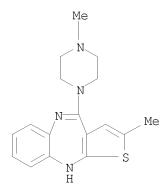
PATENT INFORMATION:

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		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DΖ	, EC,	EE,	EG,	ES,	FI,	GB,	GD,		
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS	, JP,	KΕ,	KG,	KM,	ΚP,	KR,	KΖ,		
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		SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ	, UA,	UG,	US,	UZ,	VC,	VN,	YU,		
		ZA,	ZM,	ZW															
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		IS,	ΙΤ,	LT,	LU,	LV,	MC,	NL,	PL,	PΤ	, RO,	SE,	SI,	SK,	TR,	BF,	ВJ,		
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML	, MR,	NE,	SN,	TD,	ΤG,	BW,	GH,		
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PRIORI'	ry api	PLN.	INFO	.:						IN	2004-	CH89	8		A 2	0040	906		
										WO	2005-	IN29	8		W 2	0050	905		

AB The invention is directed to a novel method for making crystalline Form I of olanzapine, wherein crude olanzapine is dissolved in a water-miscible solvent in which it is freely soluble, from which substantially pure polymorphic Form I of olanzapine is recovered by precipitation For example, 35 kg of crude olanzapine was dissolved in 105 L of DMSO, maintained at 50° for 30 min, and the solution was then filtered to remove the insolubles. Addnl. 35 L of DMSO was charged into the reactor, and press the washings through filter into another reactor. The filtrate was cooled to 40° , 350 L methanol was added slowly while maintaining the temperature between 40 and 50° , followed by slow addition of 105 L of water while maintaining the temperature between 40 and 50° to precipitate olanzapine completely from the solution The reaction mass was cooled to 0 to 5° , maintained for 3 h at the same temperature, filtered and then dried at 60 to 70° in a fluidized bed drier to obtain 25 kg of final product. The product was identified as substantially pure Form I of olanzapine by powder X-ray anal.

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L27 ANSWER 41 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN
                        2006:215328 HCAPLUS
ACCESSION NUMBER:
                         144:280623
DOCUMENT NUMBER:
TITLE:
                         A process for the preparation of anhydrous
                         olanzapine hydrochloride of Form-1
INVENTOR(S):
                         Alla, Venkat Reddy; Vyakaranam, Kameswara Rao;
                         Marella, Venuqopala Reddy; Siriqiri, Aruna Kumari;
                         Bodapati, Sreenivasa Reddy; Billa, Ranadheer Reddy
PATENT ASSIGNEE(S):
                         Lee Pharma Private Limited, India
SOURCE:
                         PCT Int. Appl., 16 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                       KIND DATE
                                          APPLICATION NO.
                               _____
                        ____
                                           ______
                        A1 20060309 WO 2004-IN270
                                                                  20040831
     WO 2006025065
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
        IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
            RU, TJ, TM
     IN 2006CN01166
                                20060519
                                                                   20060405
                                            IN 2006-CN1166
                         Α
PRIORITY APPLN. INFO.:
                                            WO 2004-IN270
                                                              W 20040831
    Malononitrile is treated with propionaldehyde in the presence of sulfur
     powder and triethylamine in DMF to give 5-amino-4-cyano-2-methylthiophene.
     2-Fluoronitrobenzene is condensed with 5-amino-4-cyano-2-methylthiophene
     in isopropanol and KOH powder give
     4-cyano-2-methyl-1-(2-nitrophenylamino)thiophene. Reduction of the thiophene
     derivative with SnCl2 and HCl in isopropanol followed by cyclization produces
     4-amino-2-methyl-10H-thieno[2,3,-b][1,5]benzodiazepine . Condensation of
     the above thieno[2,3,-b][1,5]benzodiazepine derivative with N-methylpiperazine
     in DMSO and toluene gives olanzapine tech. grade in anhydrous form.
     Recrystn. of the tech. grade anhydrous olanzapine in CH2Cl2 gives
     anhydrous olanzapine-HCl Form-I.
    783334-36-1P
ΙT
     RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (process for the preparation of anhydrous olanzapine hydrochloride of
        form-1)
     783334-36-1 HCAPLUS
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2-methyl-4-(4-methyl-1-piperazinyl)-, hydrochloride (1:1) (CA INDEX NAME)

RN

CN

10H-Thieno[2,3-b][1,5]benzodiazepine,

● HCl

IT 132539-06-1P, Olanzapine

RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(process for the preparation of anhydrous olanzapine hydrochloride of form-1)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 42 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:117133 HCAPLUS

DOCUMENT NUMBER: 144:198861

TITLE: Mixed solvate of olanzapine, method for

preparing it and method for preparing form I of

APPLICATION NO.

DATE

olanzapine therefrom

INVENTOR(S): Dalmases Barjoan, Pere; Bessa Bellmunt, Jordi

PATENT ASSIGNEE(S): Laboratorios Lesvi, S.L., Spain

SOURCE: PCT Int. Appl., 29 pp.

CODEN: PIXXD2

KIND DATE

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.

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		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS	JP,	KE,	KG,	KM,	KP,	KR,	KΖ,
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EP	1773	841			A1		2007			EΡ	2005-	7591	49		2	0050	707
EP	1773	841			В1		2007	1205									
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KR		А		2007	0619							0070					
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AB Said mixed solvate is a solvate of olanzapine /water/tetrahydrofuran in the proportion 1:1:1/2 (I). The method for preparing said solvate comprises treating a crude anhydrous olanzapine with a mixture of tetrahydrofuran/water. The method for preparing Form I of olanzapine includes desolvating the mixed solvate of formula I, by means of drying, in vacuo and under temperature-controlled conditions.

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(mixed solvate of olanzapine and method for preparing form I of olanzapine therefrom)

875056-55-6P

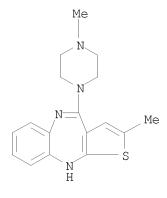
RN 875056-55-6 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine,
2-methyl-4-(4-methyl-1-piperazinyl)-, compd. with tetrahydrofuran, hydrate
(2:1:4) (CA INDEX NAME)

CM 1

CRN 132539-06-1

CMF C17 H20 N4 S



CM 2 CRN 109-99-9

CMF C4 H8 O



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L27 ANSWER 43 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:
                          2006:101681 HCAPLUS
DOCUMENT NUMBER:
                           144:177425
                          Olanzapine salts and their conversion to
TITLE:
                           olanzapine free base
INVENTOR(S):
                           Simonic, Igor; Lenarsic, Roman; Kotar-Jordan, Berta;
                           Zupet, Rok; Gnidovec, Joze
                           Krka, Tovarna Zdravil, D.D., Novo Mesto, Slovenia
PATENT ASSIGNEE(S):
                           PCT Int. Appl., 29 pp.
SOURCE:
                           CODEN: PIXXD2
DOCUMENT TYPE:
                           Patent
LANGUAGE:
                           English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                         KIND DATE
                                              APPLICATION NO.
                                                                       DATE
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                                               _____
                                              WO 2005-EP8218
                          A2
     WO 2006010620
                                  20060202
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                               20060608
     WO 2006010620
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         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
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                                20060228
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                                  20070509
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         R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
              IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL,
              BA, HR, MK, YU
PRIORITY APPLN. INFO.:
                                               SI 2004-219
                                                                    A 20040728
                                               WO 2005-EP8218
                                                                   W 20050728
AΒ
     The present invention provides olanzapine salts useful as
     intermediates in the isolation of olanzapine from complex
     reaction mixts. These salts can be used for the production of
     olanzapine base which has a suitable purity for pharmaceutical use
     and can easily be converted to anhydrous olanzapine
     polymorphic form I, in high yields. Salts such as acetate,
     benzoate, dihydrochloride and solvates such as mixed water-isopropanol and
     dichloromethane were prepared
     132539-06-1P, Olanzapine 783334-35-0P
IT
                      861452-94-0P 869190-05-6P
874363-47-0P 874363-48-1P
     861390-70-7P
     874363-46-9P
     RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT
     (Reactant or reagent); USES (Uses)
         (preparation of olanzapine form I from olanzapine salts)
     132539-06-1 HCAPLUS
RN
CN
     10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-
```

(CA INDEX NAME)

RN 783334-35-0 HCAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,
2-methyl-4-(4-methyl-1-piperazinyl)-, hydrochloride (1:2) (CA INDEX NAME)

●2 HC1

CMF C17 H20 N4 S

RN 861390-70-7 HCAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,
2-methyl-4-(4-methyl-1-piperazinyl)-, benzoate (1:1) (CA INDEX NAME)

CM 1

CRN 132539-06-1

CM 2

CRN 65-85-0 CMF C7 H6 O2

RN 861452-94-0 HCAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,
2-methyl-4-(4-methyl-1-piperazinyl)-, acetate (1:?) (CA INDEX NAME)

CM 1

CRN 132539-06-1 CMF C17 H20 N4 S

CM 2

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10/591,831
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CRN 64-19-7 CMF C2 H4 O2

RN 869190-05-6 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-, dichloromethane (1:?) (CA INDEX NAME)

CM 1

CRN 132539-06-1 CMF C17 H20 N4 S

CM 2

CRN 75-09-2 CMF C H2 C12

${\tt Cl-CH}_2-{\tt Cl}$

RN 874363-46-9 HCAPLUS

CN 2-Propanol, compd. with 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine, hydrate (1:?:?) (CA INDEX NAME)

CM 1

CRN 132539-06-1 CMF C17 H20 N4 S

CM 2

CRN 67-63-0 CMF C3 H8 O

RN 874363-47-0 HCAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,
2-methyl-4-(4-methyl-1-piperazinyl)-, benzenesulfonate (1:?) (CA INDEX NAME)

CM 1

CRN 132539-06-1 CMF C17 H20 N4 S

CM 2

CRN 98-11-3 CMF C6 H6 O3 S

RN 874363-48-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-, perchlorate (1:?) (CA INDEX NAME)

CM 1

CRN 132539-06-1 CMF C17 H20 N4 S

CM 2

CRN 7601-90-3 CMF Cl H O4

IT 783334-36-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of olanzapine form I from olanzapine salts)

RN 783334-36-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-, hydrochloride (1:1) (CA INDEX NAME)

● HCl

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 44 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:54799 HCAPLUS

DOCUMENT NUMBER: 144:135287

TITLE: Improved process for making form I of

olanzapine.

INVENTOR(S): Thakashinamoorthy, Chandiran; Krishnan, Devarajan;

Govindaraju, Saravanan; Jothi, Shobana Shasun Chemicals and Drugs Limited, India

PATENT ASSIGNEE(S): Shasun Chemicals and D. SOURCE: PCT Int. Appl., 18 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

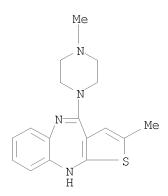
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	WO	2006	0061	 85		A1	_	2006	0119	,	WO 2	005-	 IN23	 9		2	0050	713
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			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KP,	KR,	KΖ,
			LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MΖ,	NA,
			NG,	NΙ,	NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,
			SL,	SM,	SY,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,
			ZA,	ZM,	ZW													
		RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
			IS,	ΙΤ,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ΒJ,
			CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG,	BW,	GH,
			GM,	ΚE,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	BY,
			KG,	KΖ,	MD,	RU,	ТJ,	TM										
	ΙN	2004	CH00	678		Α		2006	0602		IN 2	004-	CH67	8		2	0040	714
	EP	1781	666			A1		2007	0509		EP 2	005-	7839	95		2	0050	713
		R:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
			IS,	ΙΤ,	LI,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR	
	IN	2007	CN00	413		Α		2007	0824		IN 2	007-	CN41	3		2	0070	131
	US 20080009481							2008	0110		US 2	007-		20070905				
PRIO	RIORITY APPLN. INFO.:										IN 2	004-	-	A 2	0040	714		
											WO 2005-IN239						0050	713
7) D	Trib.	1 - 1 -	+		4	1000			والماكال	علیہ مہ ام		7	- a - a - la	o f				

- AB This invention discloses a new dihydrate polymorph of Olanzapine (hereinafter referred to as "dihydrate C"), and a process for recovering anhydrous Form I of Olanzapine from this novel Dihydrate C.
- RN 205485-16-1 HCAPLUS
- CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:2) (CA INDEX NAME)

●2 H2O

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)



REFERENCE COUNT:

7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 45 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:54122 HCAPLUS

DOCUMENT NUMBER: 144:150401

TITLE: A process for the preparation of olanzapine

INVENTOR(S): Shastri, Jwalant Ashesh; Bhatnagar, Akshat; Thaper,

Rajesh Kumar; Dubey, Sushil Kumar Jubilant Organosys Ltd., India

SOURCE: PCT Int. Appl., 20 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT ASSIGNEE(S):

PA:	CENT 1	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D.	ATE	
WO	2006	0061	 80		A1	_	2006	0119	,	——— WO 2	004-	 IN20	 7		2	 0040	 714
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		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
							PT,										
		CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,	GM,	KE,	LS,
		MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,
			ΤJ,		·	·	·	,	•	•	•	•	·	·	•	·	·
CA	2576	862	•		A1		2006	0119	1	CA 2	004-	2576	862		2	0040	714
EP	1778	649			A1		2007	0502		EP 2	004-	7451	38		2	0040	714
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							PL,										
WO	2007				A1		2007			WO 2					2	0060	314
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
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		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KN,	KΡ,	KR,
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		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG,	BW,	GH,
		GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	KZ,	MD,	RU,	TJ,	TM										
US	2009	0005	556		A1		2009	0101		US 2	-800	6323	62		2	0800	818
ORIT	APP	LN.								WO 2	004-	IN20	7	1	w 2	0040	714
ER SO	DURCE	(S):			CAS	REAC	CT 14	4:150	0401								

GI

AB A process for the preparation of title compound I was disclosed. For example,

а

solution of 2-(2-aminoanilino)-5-methylthiophene-3-carbonitrile (10.0 g), N-methylpiperazine (60 mL) and N-methylpiperazine hydrochloride (24 gm) was heated at 120 °C until the reaction was completed to afford after work olanzapine. Of note, 2-polymorphic forms of olanzapine were isolated.

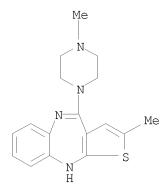
IT 132539-06-1P, Olanzapine

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(polymorphic forms I, II; preparation of olanzapine)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)



REFERENCE COUNT:

1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 46 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2005:1220824 HCAPLUS 143:466081 DOCUMENT NUMBER: Process for the preparation of olanzapine TITLE: form-I INVENTOR(S): Chava, Satyanarayana; Gorantla, Seeta Ramanjaneyulu; Abbineni, Jyothi Basu PATENT ASSIGNEE(S): Matrix Laboratories Ltd., India PCT Int. Appl., 17 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE ____ _____ WO 2005-IN98 A2 WO 2005107375 20051117 20050404 20060406 WO 2005107375 A3 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,

ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG A 20060519 IN 2004-CH416 IN 2004CH00416 20040506

IN 2004-CH416 A 20040506 PRIORITY APPLN. INFO.: The present invention provides a reproducible, novel, com. feasible process to obtain olanzapine Form-I of substantial polymorphic purity with minimal number of steps using minimal number of solvents by condensation of 4-Aminomethyl-10H-thieno[2,3-b][1,5] benzodiazepine hydrochloride with N-Me piperazine followed by isolation of olanzapine methylene chloride solvate and conversion of the same to Olanzapine Form-I.

ΤT 132539-06-1P, Olanzapine

> RL: PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses) (preparation of olanzapine polymorphism through olanzapine methylene chloride solvate)

132539-06-1 HCAPLUS RN

10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-CN (CA INDEX NAME)

IT 869190-05-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of olanzapine polymorphism through

olanzapine methylene chloride solvate)

RN 869190-05-6 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine,

2-methyl-4-(4-methyl-1-piperazinyl)-, dichloromethane (1:?) (CA INDEX NAME)

CM 1

CRN 132539-06-1 CMF C17 H20 N4 S

CM 2

CRN 75-09-2 CMF C H2 C12

 ${\tt Cl-CH}_2{\tt -Cl}$

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L27 ANSWER 47 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:
                            2005:1042253 HCAPLUS
DOCUMENT NUMBER:
                             143:332562
                             Synthesis of 2-methyl-4-(4-methyl-1-piperazinyl)-10H-
TITLE:
                             thieno[2,3-b][1,5]benzodiazepine (olanzapine
                             ) and salts
INVENTOR(S):
                            Mesar, Tomaz; Copar, Anton; Sturm, Hubert; Ludescher,
                             Johannes
                             Lek Pharmaceuticals D.D., Slovenia
PATENT ASSIGNEE(S):
                             PCT Int. Appl., 41 pp.
SOURCE:
                             CODEN: PIXXD2
DOCUMENT TYPE:
                             Patent
LANGUAGE:
                             English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                           KIND DATE
                                                 APPLICATION NO.
                                                                            DATE
                           ____
                                    _____
                                                  _____
                            A2 20050929
A3 20070426
                                                 WO 2005-EP2876
     WO 2005090359
                                                                            20050317
                       A3
     WO 2005090359
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
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               RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
               MR, NE, SN, TD, TG, AP, EA, EP, OA
                                   20051031 SI 2004-79
     SI 21747
                            Α
                                                                             20040318
     AU 2005223338
                            Α1
                                   20050929
                                                  AU 2005-223338
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     CA 2558654
                            A1
                                     20050929
                                                 CA 2005-2558654
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     EP 1749010
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                                                                             20050317
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               HR, LV, MK, YU
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     CN 101084222
                             A
                                  20071205
20070615
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                                                                             20050317
     IN 2006CN03389
                            A
                                                 IN 2006-CN3389
                                                                             20060918
     US 20080161557
                            A1 20080703
                                                 US 2006-598816
                                                                             20061214
                                                                        A 20040318
PRIORITY APPLN. INFO.:
                                                   SI 2004-79
                                                                         A 20041116
                                                   SI 2004-311
                                                                    W 20050317
                                                   WO 2005-EP2876
OTHER SOURCE(S): MARPAT 143:332562
AΒ
     The invention relates to a new process for the preparation of salts of
     olanzapine and transformation thereof into a pharmaceutically
     acceptable pure and discolored final product. The present invention also
     relates to new processes for the preparation of pure olanzapine.
     Thus, olanzapine was converted to its fumarate salt by reaction
     with fumaric acid in iso-PrOH.
     777081-25-1P
                         861390-70-7P
                                            865369-77-3P
ΙT
     RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
         (preparation of olanzapine and salts)
```

777081-25-1 HCAPLUS

RN

CN 10H-Thieno[2,3-b][1,5]benzodiazepine,
2-methyl-4-(4-methyl-1-piperazinyl)-, (2E)-2-butenedioate (9CI) (CA INDEX NAME)

CM 1

CRN 132539-06-1

CMF C17 H20 N4 S

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 861390-70-7 HCAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,
2-methyl-4-(4-methyl-1-piperazinyl)-, benzoate (1:1) (CA INDEX NAME)

CM 1

CRN 132539-06-1 CMF C17 H20 N4 S

CM 2

CRN 65-85-0 CMF C7 H6 O2

RN 865369-77-3 HCAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,
2-methyl-4-(4-methyl-1-piperazinyl)-, ethanedioate (1:?) (CA INDEX NAME)

CM 1

CRN 132539-06-1 CMF C17 H20 N4 S

CM 2

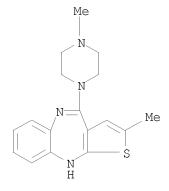
CRN 144-62-7 CMF C2 H2 O4

IT 132539-06-1P, Olanzapine
 RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use);
 BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent);
 USES (Uses)

(preparation of olanzapine and salts)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 48 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2005:1004752 HCAPLUS 143:311947 DOCUMENT NUMBER: Isopropanol water solvate of olanzapine TITLE: INVENTOR(S): Kotar-Jordan, Berta; Lenarsic, Roman; Grcman, Marija; Smrkolj, Matej; Meden, Anton; Simonic, Igor; Zupet, Rok; Gnidovec, Joze; Benkic, Primoz PATENT ASSIGNEE(S): Krka, Tovarna Zdravil D.D. Novo Mesto, Slovenia PCT Int. Appl., 34 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. ____ ______ WO 2005085256 A1 20050915 WO 2005-EP2389 20050307 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG А 20051031 SI 2004-73 SI 21746 20040308 A1 20060706 DE 2004-102004060412 DE 102004060412 20041214 CA 2557986 A1 20050915 CA 2005-2557986 20050307 A1 20061213 EP 2005-707723 EP 1730153 20050307 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU NO 2006004484 20061129 NO 2006-4484 20061003 Α A 20070615 IN 2006-CN3716 A1 20070816 US 2006-591831 IN 2006CN03716 20061009 US 20070191348 20061023 SI 2004-73 A 20040308 PRIORITY APPLN. INFO.: DE 2004-102004060412A 20041214 WO 2005-EP2389 W 20050307 The invention relates to a novel and well defined solvate form of AB olanzapine which contains 2 mols. of water and 1 mol. of isopropanol per 2 mols. of olanzapine, and which can be converted into other, forms of olanzapine, in particular form I of olanzapine, as well as processes for preparing form I olanzapine.

864743-41-9P ΙT

> RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(olanzapine solvate; prepn of isopropanol water solvates of olanzapine)

864743-41-9 HCAPLUS RN

CN 2-Propanol, compd. with 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3b][1,5]benzodiazepine, hydrate (1:2:2) (CA INDEX NAME)

CM 1

CRN 132539-06-1 CMF C17 H20 N4 S

CM 2

CRN 67-63-0 CMF C3 H8 O

IT 132539-06-1, Olanzapine

RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)

(polymorphism; prepn of isopropanol water solvates of olanzapine)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

IT 132539-06-1DP, Olanzapine, methylene chloride

hemisolvate

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn of isopropanol water solvates of olanzapine)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)(CA INDEX NAME)

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn of isopropanol water solvates of olanzapine

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 49 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:962265 HCAPLUS

DOCUMENT NUMBER: 143:235359

TITLE: Process for the preparation of olanzapine

form 1 useful as antipsychotic drug

INVENTOR(S): Rammohan Rao, Davuluri; Dwivedi, Shriprakash Dhar;

Sreenivasulu, Pamujula; Sasi Kiran, Surapaneni

PATENT ASSIGNEE(S): Neuland Laboratories Limited, India

SOURCE: PCT Int. Appl., 27 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAI	CENT :	NO.			KIND DATE					APPL	ICAT	ION I	DATE						
WO	2005	0804	01		A1 20050901			,	WO 2	004-	 IN21	0	20040716						
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,		
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,		
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KP,	KR,	KΖ,	LC,		
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,		
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,		
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,		
		ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,		
		EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	ΙΤ,	LU,	MC,	NL,	PL,	PT,	RO,	SE,		
		SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,		
		SN,	TD,	ΤG															
IN	2004	CH00	128		А		2006	0203		IN 2	004 - 0	CH12	20040219						
EP	1716	154			A1		2006	1102		EP 2	004-	7706	70		20040716				
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,		
		ΙE,	SI,	LT,	LV,	FΙ,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	PL,	SK,	H	
US	2007	0072	845		A1		2007	0329	US 2005-557650						20051118				
ORITY	APP	LN.	INFO	.:						IN 2	A 20040219								
									,	WO 2	W 20040716								

This invention provides an improved process for the preparation of Olanzapine Form (I). More specially, the invention provides in-situ improved process for the direct preparation of crystalline form of Olanzapine Form (I). The present invention also provides highly pure Olanzapine Form I with single individual impurity less than 0. 1 % by HPLC. The process comprises: (1) refluxing a mixture of 4-amino-2-methyl-10H-thieno[2,3-b][1,5]benzodiazepine hydrochloride, N-methylpiperazine, DMSO, and toluene at $110-130^{\circ}$, (2) cooling the reaction mixture to $20-90^{\circ}$, (3) adding water to the cooled mixture, (4) cooling the resulting mixture to $(-10)-30^{\circ}$, (5) filtering the mixture, (6) slurring the resulting wet cake with water at $50-90^{\circ}$, (7) filtering the material and sucking dry, (8) repeating the steps 6 to 7till the traces of DMSO and its odor are removed, (9) dissolving the resulting wet cake in a chlorinated solvent at 25-30°, (10) separating the aqueous layer, (11) stirring the organic layer with anhydrous Na2SO4 or anhydrous

MgSO4, (12) filtering and washing with CH2Cl2, (13) repeating the steps (11) and (12) till the moisture content is \leq 0.1 %, and (14) purging dry ammonia gas in CH2Cl2 layer to get polymorphic form of Olanzapine form I. The process continues as follows; (15) removing the MgSO4 from the reaction mixture and washing the salts with

CH2Cl2, (16) refluxing the CH2Cl2 layer, (17) concentrating the reaction $\mbox{\ensuremath{\text{mixture}}}$

under vacuum, (18) cooling the reaction mixture to a temperature, (19) stirring the material at $0-5^{\circ}$, (20) filtering the material and washing with chilled CH2Cl2, (21) air drying the material, and (22) vacuum drying the product at $60-70^{\circ}$.

RN 132539-06-1 HCAPLUS CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

SOURCE:

L27 ANSWER 50 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

2005:901257 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 144:218913

Thermal behaviour and stability in Olanzapine TITLE: AUTHOR(S): Polla, Griselda I.; Vega, Daniel R.; Lanza, Hilda; Tombari, Dora G.; Baggio, Ricardo; Ayala, Alejandro Pedro; Mendes Filho, Josue; Fernandez, Daniel; Leyva,

Gabriela; Dartayet, Gustavo

CORPORATE SOURCE: Comision Nacional de Energia Atomica, Unidad de

Actividad Fisica, Buenos Aires, 1650, Argent. International Journal of Pharmaceutics (2005),

301(1-2), 33-40

CODEN: IJPHDE; ISSN: 0378-5173

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal English LANGUAGE:

The stability and thermal behavior of two anhydrate phases and a new mixed AB water: DMSO solvate of Olanzapine

(2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno-[2,3-

b][1,5]benzodiazepine) are studied by different methods: differential scanning calorimetry (DSC), x-ray powder diffraction (XRPD) and Raman scattering (RS). Single crystal structural data for the latter phase are presented, confirming the presence of the (Olanzapine) 2 dimer as the structural building unit of all known phases of the drug, either anhydrate or solvated. An apparent interconversion between both solid state forms is shown to be an artifact and explained in terms of a melting-recrystn. process.

132539-06-1, Olanzapine 875611-83-9 ΤT

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(thermal behavior and stability in olanzapine)

RN 132539-06-1 HCAPLUS

10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-CN (CA INDEX NAME)

RN 875611-83-9 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-, compd. with sulfinylbis[methane] (5:2), pentahydrate (9CI) (CA INDEX NAME)

CM 1

CRN 132539-06-1 CMF C17 H20 N4 S

CM 2

CRN 67-68-5 CMF C2 H6 O S

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 51 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

2005:813566 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 144:218907

Olanzapine form 1 TITLE:

AUTHOR(S): Anon. CORPORATE SOURCE: Spain

SOURCE: IP.com Journal (2005), 5(6A), 34 (No.

IPCOM000125182D), 23 May 2005 CODEN: IJPOBX; ISSN: 1533-0001

PUBLISHER: IP.com, Inc. DOCUMENT TYPE: Journal; Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT N	Ο.	KIND	DATE	APPLICATION NO.	DATE
IP 12518			20050523	IP 2005-125182D	20050523
PRIORITY APPL	N. INFO.:			IP 2005-125182D	20050523

AΒ An improved method for the preparation of olanzapine form I is described. The method is based on the reaction of the benzodiazepine of formula II with methylpiperazine (III). The reaction is described in aprotic solvent such as toluene, dimethylsulfoxide or DMF. The obtained product is not pure and a crystallization is required to achieve the desired quality and polymorphic form.

ΙT 132539-06-1P, Olanzapine

> RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses)

(improved synthesis and purification of olanzapine form I)

RN 132539-06-1 HCAPLUS

10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-CN (CA INDEX NAME)

ΙT 861452-94-0P

> RL: PEP (Physical, engineering or chemical process); PYP (Physical process); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)

(improved synthesis and purification of olanzapine form I)

RN 861452-94-0 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-, acetate (1:?) (CA INDEX NAME)

CM 1

CRN 132539-06-1 CMF C17 H20 N4 S

CM 2

CRN 64-19-7 CMF C2 H4 O2

L27 ANSWER 52 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:735332 HCAPLUS

DOCUMENT NUMBER: 143:199900

TITLE: Composition comprising salts or hydrates or

polymorphs of idazoxan or its derivatives

INVENTOR(S): Bougaret, Joel; Avan, Jean-Louis; Segonds, Roland

PATENT ASSIGNEE(S): Pierre Fabre Medicament, Fr.

SOURCE: U.S. Pat. Appl. Publ., 26 pp., Cont.-in-part of U.S.

Ser. No. 722,451.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PAT	TENT NO.	KINI	D DATE	APPLICATION NO.	DATE
US	20050176798	A1	20050811	US 2004-974675	20041028
FR	2861299	A1	20050429	FR 2003-12626	20031028
FR	2861299	В1	20060127		
US	20050090537	A1	20050428	US 2003-722451	20031128
US	7338970	В2	20080304		
AU	2004285316	A1	20050512	AU 2004-285316	20041028
CA	2542752	A1	20050512	CA 2004-2542752	20041028
EP	1682124	A1	20060726	EP 2004-805330	20041028
EP	1682124	В1	20071219		
	R: AT, BE,	CH, DE,	DK, ES, FR,	GB, GR, IT, LI, LU,	NL, SE, MC, PT,
				CY, AL, TR, BG, CZ,	
				CN 2004-80031500	20041028
BR	2004016006 2007509911	A	20070102	BR 2004-16006	20041028
		A			
		A1	20080328	HK 2007-100684	20070119
US	20080262067	A1	20081023		
PRIORITY	APPLN. INFO.	:		FR 2003-12626	A 20031028
				US 2003-722451	
				US 2004-974675	
				WO 2004-FR2773	W 20041028

- AB The present invention discloses a pharmaceutical composition comprising idazoxan or derivs. and their therapeutically acceptable salts, racemates, optically active isomers and polymorphs. Thus, a tablet was prepared comprising idazoxan hydrochloride 20%, microcryst. cellulose 10%, glyceryl behenate 5%, colloidal silica 0.1% and lactose monohydrate to 100%. The addition of idazoxan to the treatment with fluphenazine in patients with schizophrenia to control extrapyramidal symptoms led to significant reduction in the symptoms in comparison with fluphenazine monotherapy.
- IT 132539-06-1, Olanzapine
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (in combination with; composition comprising salts or hydrates or polymorphs of idazoxan or its derivs.)
- RN 132539-06-1 HCAPLUS
- CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

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L27 ANSWER 53 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:
                              2005:696917 HCAPLUS
                               143:179517
DOCUMENT NUMBER:
TITLE:
                               A process for making olanzapine in a
                               polymorph form I
INVENTOR(S):
                               Keltjens, Rolf
PATENT ASSIGNEE(S):
                               Synthon B.V., Neth.
                               PCT Int. Appl., 25 pp.
SOURCE:
                               CODEN: PIXXD2
DOCUMENT TYPE:
                               Patent
LANGUAGE:
                               English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
      PATENT NO.
                                                     APPLICATION NO.
                             KIND DATE
                              ____
                                       _____
                                                      ______
      WO 2005070937
                               A1 20050804 WO 2005-EP834
                                                                                   20050126
           W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
           W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML,
                RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
                MR, NE, SN, TD, TG
                                      20061115
                                                      EP 2005-701231
      EP 1720885
                               A 1
                                                                                    20050126
           R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
                IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR
      US 20050272720
                              A1
                                                       US 2005-50851
                                        20051208
                                                                                    20050127
PRIORITY APPLN. INFO.:
                                                       US 2004-539120P
                                                                              P 20040127
                                                       US 2004-562225P
                                                                              P 20040415
                                                       US 2004-569607P
                                                                              P 20040511
                                                       WO 2005-EP834
                                                                                W 20050126
AΒ
      Heating a solid, preferably crystalline, olanzapine acetate
      produces olanzapine form I in high purity, free of other
      olanzapine forms and in good yields. The olanzapine
      acetate can also be used to purify raw or tech. grade olanzapine
      and to serve as an intermediary to other forms of olanzapine
      base. Olanzapine acetate was prepared by the reaction of
      olanzapine with acetic acid. Olanzapine acetate was
      stored at 65-70^{\circ} for 18 h to obtain the olanzapine form
      861387-16-8P
ΙT
      RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);
      BIOL (Biological study); PREP (Preparation); USES (Uses)
          (process for making olanzapine in polymorph form I)
      861387-16-8 HCAPLUS
RN
CN
      10H-Thieno[2,3-b][1,5]benzodiazepine,
      2-methyl-4-(4-methyl-1-piperazinyl)-, acetate (1:1) (CA INDEX NAME)
      CM
      CRN 132539-06-1
      CMF C17 H20 N4 S
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CM 2

CRN 64-19-7 CMF C2 H4 O2

IT 132539-06-1P, Olanzapine

RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(process for making olanzapine in polymorph form I)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

SOURCE:

L27 ANSWER 54 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:687896 HCAPLUS

DOCUMENT NUMBER: 144:78318

TITLE: Olazipinium nicotinate

AUTHOR(S): Ravikumar, K.; Swamy, G. Y. S. K.; Sridhar, B.; Roopa,

S.

CORPORATE SOURCE: Laboratory of X-ray Crystallography, Indian Institute

of Chemical Technology, Hyderabad, 500 007, India Acta Crystallographica, Section E: Structure Reports

Online (2005), E61(8), o2720-o2723 CODEN: ACSEBH; ISSN: 1600-5368

URL: http://journals.iucr.org/e/issues/2005/08/00/bt67

03/index.html

PUBLISHER: Blackwell Publishing Ltd.

DOCUMENT TYPE: Journal; (online computer file)

LANGUAGE: English

AB The crystal structure of the title compound, C17H21N4S+·C6H4NO2-, [systematic name: 1-methyl-4-(2-methyl-10H-thieno[2,3-b][1,5]benzodiazepin-4-yl)hexahydropyrazin-1-ium nicotinate] is reported. Crystallog. data are given. The central seven-membered heterocycle is in a boat conformation, while the piperazine ring displays a chair conformation with its Me group oriented equatorially. The coulombic interaction between olanzapinium and

nicotinate ions is supplemented by intra- and intermol. N-H $\cdot\cdot\cdot$ O H bonds, forming infinite chains along the c

axis.

IT 872042-73-4

RL: PRP (Properties)

(crystal structure of)

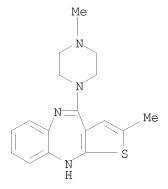
RN 872042-73-4 HCAPLUS

CN 3-Pyridinecarboxylic acid, compd. with

2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (1:1) (CA INDEX NAME)

CM 1

CRN 132539-06-1 CMF C17 H20 N4 S



CM 2

CRN 59-67-6

CMF C6 H5 N O2

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 55 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:638703 HCAPLUS

DOCUMENT NUMBER: 143:139194

TITLE: Buccal dosage forms for extended drug release INVENTOR(S): Jain, Rajesh; Jindal, Kour Chand; Singh, Sukhjeet

PATENT ASSIGNEE(S): Panacea Biotec Ltd., India

SOURCE: PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

132539-06-1 HCAPLUS

(CA INDEX NAME)

PATENT INFORMATION:

	PATEN'	г ио.					DATE			APPL	ICAT	ION 1	.OV		D	ATE		
	WO 20	50656	40		A1		2005			WO 2	005-	IN3			2	0050	105	
	WO 20		AG,				2005			BB	BG	BR	ВW	ВY	B7.	$C\Delta$	СН	
	VV		CO,			•						•			•	•		
			GH,			•							•			•		
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		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
			TM,															SM
	R	V: BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	
			BY,															
	EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BE, BJ, CE, CG, CI, CM, GA, GN, GO, GW, MI,																	
	RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG																	
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10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-

RN

CN

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 56 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:369131 HCAPLUS

DOCUMENT NUMBER: 142:417199

TITLE: Pharmaceutical composition based on idazoxan, salts,

hydrates or polymorphs

INVENTOR(S): Bougaret, Joel; Avan, Jean-Louis; Segonds, Roland

PATENT ASSIGNEE(S): Fr

SOURCE: U.S. Pat. Appl. Publ., 22 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

	TENT				KIND DATE								NO.			ATE		
	2005	0090	537		A1		2005	0428					 51			 0031		
	7338	970			В2		2008	0304										
	2861	299			A1		2005	0429		FR 2	003-	1262	6		2	0031	028	
	2861																	
ΑU	2004	2853	16		A1		2005	0512		AU 2	004-	2853	16		2	0041	028	
-	2542	-					2005			-		-	-				-	
WO	2005																	
	W:						ΑU,											
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							LV,											
							PL,											
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	
	RW:	BW,	GH,	GM,	KΕ,	LS,	MW,	MZ,	NΑ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	
															CZ, DE, DK, PT, RO, SE,			
					BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	
		,	TD,												_			
	2005																	
	1682									EP 2	004-	8053	30		2	0041	028	
EP	1682														~_			
	R:						ES,											
~	4000						RO,											HF
-	1870						2006											
BK	2004	0160	06		А		2007	0102		BR Z	004-	1600		2	0041	028		
JP	2007	5099	11		I		2007	0419		JP Z	006-	53/3	5/		2	0041	028	
	3813	31			T		2008	0112		AI Z	004-	8053		2	0041	028		
	2297				T3 20080501													
					A 20060705													
HK	1094	/69 0112	000		A1 20080328					HK 2007-100684						00/0	117	
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LTT]	ı APP	ΤΙΛ •	TIMEO	• •						FR 2003-12626 US 2003-722451					n	0031	120	
										MO 2	003-	/224 ED27	73		MAZZ Mar o	0031	170	
										WU Z	004-	rKZ/	13		w Z	0041	UZÖ	

AB A pharmaceutical composition comprises an idazoxan salt or idazoxan hydrate 5, microcryst. cellulose 10, lubricant 5, colloidal silica 0.1, and lactose monohydrate qs to 100%. Crystallog. anal. by powder x-ray diffraction was carried out on idazoxan polymorphs.

IT 132539-06-1, Olanzapine

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical composition based on idazoxan or salts or hydrates or

polymorphs)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

REFERENCE COUNT:

10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 57 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

2004:927215 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 141:384322

TITLE: Preparation of polymorphic

crystalline forms of the antipsychotic agent

olanzapine dihydrochloride

Petho, Janos; Barkoczy, Jozsef; Kotay Nagy, Peter; INVENTOR(S):

Simiq, Gyula; Szent-Kirallyi, Zsuzsa

PATENT ASSIGNEE(S): Egis Gyogyszergyar Rt., Hung.

SOURCE: PCT Int. Appl., 59 pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	CENT				KIND DATE		APPLICATION NO.						D.	ATE				
	2004															0040	422	
	W:							ΑZ,										
		,	,	,	,		,	DK,	,		,		,		,		,	
								IL,										
								MA,										
								PT,										
								UA,										
	RW:							MZ,										
								TM,									•	
								IE,										
				BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	
		TD,			- 0					^					_			
	2003									HU 2	003-	1082			2	0030	422	
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	2004 2522																	
	1620																	
	1620									LP Z	004-	1200	J4		_	0040	422	
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	11.							MK,										
CM	1777			шт,				0524										111
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	2006									JP 2	006-	5062	49		2	0040	422	
ZA	2005	0089	36		A		2008	0730		ZA 2	005-	8936			2	0040	422	
ΑT	4013	32			Т		2008	0815	5 AT 2004-728854						2	0040	422	
ES	2310	728			Т3		2009	0116	ZA 2005-8936 AT 2004-728854 ES 2004-728854						2	0040	422	
CN 101468999					A 20090116					1 CN 2008-10125441						0040	422	
	1093																	
US	2007	0004	706		A1		2007	0104		US 2	006-	5539	08		2	0060	911	
RITY	APP	LN.	INFO	.:								1082						
												8001	0665		A3 2	0040	422	
										WO 2	004 -	HU42			w 2	0040	422	

AΒ Polymorphic crystalline forms of the antipsychotic agent olanzapine dihydrochloride are presented.

783334-35-0P 783334-36-1P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of polymorphic crystalline forms of the

antipsychotic agent olanzapine dihydrochloride)

RN 783334-35-0 HCAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,
2-methyl-4-(4-methyl-1-piperazinyl)-, hydrochloride (1:2) (CA INDEX NAME)

●2 HC1

RN 783334-36-1 HCAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,
2-methyl-4-(4-methyl-1-piperazinyl)-, hydrochloride (1:1) (CA INDEX NAME)

● HCl

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 58 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:754425 HCAPLUS

DOCUMENT NUMBER: 141:282789

TITLE: Pharmaceutical cocrystals of active ingredients
INVENTOR(S): Almarsson, Oern; Bourghol Hickey, Magali; Peterson,
Matthew; Moulton, Brian; Rodriguez-Hornedo, Nair

PATENT ASSIGNEE(S): Transform Pharmaceuticals, Inc., USA; University of South Florida; The Regents of the University of

Mishing Formaths Mishael T

Michigan; Zaworotko, Michael J.

SOURCE: PCT Int. Appl., 561 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: 18

PATENT INFORMATION:

PA:	TENT		KIN		DATE			APPL	ICAT	ION :	NO.		D.	ATE			
	2004				A2		2004			 WO 2	004-	 US62	 88		2	0040	226
WO	2004				АЗ		2005	-									
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		CN,	CO,	CR,	,			DK,		DZ,							GD,
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		LK,	LR,	LS,	LT,		LV,			MG,	•	•				NΑ,	ΝI
	RW:	BW,	GH,	${ m GM}$,	KE,	,	MW,	,	SD,		SZ,		UG,	,	ZW,	ΑT,	BE,
		BG,	CH,	CY,	CZ,		DK,									ΙΤ,	LU,
		,	ΝL,	•		SE,		SK,		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,
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				CF,	CG,	CI,			GN,	GQ,	GW,	ML ,	MR,	ΝE,	SN,	TD,	ΤG
US	2004	0019	211		A1		2004	-		US 2	003-	4493	07		2	0030	530
US	7078				В2		2006										
WO	2004	0002	84		A1		2003			WO 2						0030	
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		UG,	US,	UZ,	VN,	YU,		ZM,	ZW								
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		FΙ,	FR,	GB,	GR,	HU,				MC,					SI,	SK,	TR,
			ВJ,	CF,	CG,		CM,							ΝE,			ΤG
US	2005				A1		2005			US 2						0030	
WO	2004				A1		2004									0030	
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JP 2007525502
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AU 2004270238
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A 20060602

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A1 20070125

B2 20090728

A1 20090402
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US 2004-926842
WO 2004-US28456
                    20040901
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WO 2004-US29013
                  W 20040904
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A pharmaceutical composition comprises a cocrystal of an active pharmaceutical AΒ ingredient (API) and a cocrystal former hydrogen bonded to each other, wherein the API has at least 1 functional group selected om, e.g., ether, thioether, alc., thiol, aldehyde, ketone, thioketone, ester, carboxylic acid, amine, ammonia, imine, thiocyanate, cyanamide, oxime, nitro, S-heterocyclic ring, N-heterocyclic ring, or pyrrole and the cocrystal former has at least 1 functional group selected om, e.g., amine, amide, pyridine, imidazole, indole, pyrrolidine, carbonyl, carboxyl, hydroxyl, phenol, or sulfone, such that the API and cocrystal former are capable of cocrystq. om a solution phase under crystallization conditions. The co-crystals have better solubility, dose response, dissoln., bioavailability, stability or hygroscopicity than the API. Thus, co-crystals of celecoxib and nicotinamide (1:1 molar ratio) were prepared by mixing the acetone solution of the 2 and allowing the solution to evaporate slowly overnight.

IT 756835-49-1P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (pharmaceutical cocrystals of active ingredients)

RN 756835-49-1 HCAPLUS

CN 3-Pyridinecarboxamide, compd. with 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (1:?) (CA INDEX NAME)

CM 1

CRN 132539-06-1 CMF C17 H20 N4 S

CM 2

CRN 98-92-0 CMF C6 H6 N2 O

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

L27 ANSWER 59 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:754423 HCAPLUS

DOCUMENT NUMBER: 141:282787

TITLE: Pharmaceutical cocrystal compositions of drugs such as

carbamazepine, celecoxib, and olanzapine

INVENTOR(S): Almarsson, Oern; Bourghol Hickey, Magali; Peterson,

Matthew; Zaworotko, Michael J.; Moulton, Brian;

Rodriguez-Hornedo, Nair

PATENT ASSIGNEE(S): Transform Pharmaceuticals, Inc., USA; University of

South Florida; The Regents of the University of

Michigan

SOURCE: PCT Int. Appl., 489 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 18

PATENT INFORMATION:

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 $$\tt WO~2004-US29013 \tt W~20040904$$ AB A pharmaceutical composition comprising a cocrystal of an active pharmaceutical

ingredient (API) and a cocrystal forming compound wherein the API has at least 1 functional group selected from, e.g., ether, thioether, alc., thiol, aldehyde, ketone, thioketone, nitrate ester, phosphate ester, thiophosphate ester, ester, thioester, amine, secondary amine, ammonia, imidazole, or pyridine and the co-crystal forming compound has at least 1 functional group selected from e.g., amine, amide, pyridine, imidazole, indole, pyrrolidine, carbonyl, carboxyl, hydroxyl, phenol, or sulfone,, such that the API and cocrystal forming compound are capable of co-crystallizing

from a solution phase under crystallization conditions. Thus, carbamazepine and

p-phthalaldehyde were dissolved in MeOH and slow evaporation of the solvent gave 1:1 carbamazepine-p-phthalaldehyde cocrystals. The cocrystals were characterized by powder x-ray diffraction, DSC and IR spectrometry.

IT 756835-49-1P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(pharmaceutical cocrystal compns. of drugs such as carbamazepine and celecoxib and olanzapine)

RN 756835-49-1 HCAPLUS

CN 3-Pyridinecarboxamide, compd. with

2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (1:?) (CA INDEX NAME)

CM 1

CRN 132539-06-1 CMF C17 H20 N4 S

CM 2

CRN 98-92-0 CMF C6 H6 N2 O

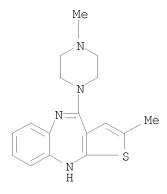
IT 132539-06-1, Olanzapine

RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)

(pharmaceutical cocrystal compns. of drugs such as carbamazepine and celecoxib and olanzapine)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)



OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 60 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:589401 HCAPLUS

DOCUMENT NUMBER: 141:128859

TITLE: Pharmaceutical propylene glycol solvate compositions

INVENTOR(S): Tawa, Mark; Almarsson, Oern; Remenar, Julius

PATENT ASSIGNEE(S): Transform Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 317 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 18

PATENT INFORMATION:

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                                                                 Ρ
                                                                    20021126
                                            US 2003-439282P
                                                                 Ρ
                                                                    20030110
                                            US 2003-439283P
                                                                 Ρ
                                                                    20030110
                                            US 2003-444315P
                                                                 Ρ
                                                                    20030131
                                            US 2003-451213P
                                                                 Ρ
                                                                    20030228
                                            US 2003-378956
                                                                 Α
                                                                    20030303
                                            US 2003-463962P
                                                                 Ρ
                                                                    20030418
                                            US 2003-449307
                                                                    20030530
                                                                 Α
                                            US 2003-487064P
                                                                 Ρ
                                                                    20030711
                                            US 2003-637829
                                                                Α
                                                                    20030808
                                                               A2 20030904
                                            WO 2003-US27772
                                            US 2003-660202
                                                               A2 20030911
                                            US 2003-747742
                                                               A 20031229
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US 2004-747742 A1 20031229
WO 2003-US41642 W 20031229
WO 2004-US400 W 20040108
WO 2004-US6288 A 20040226
US 2004-548343P P 20040227
WO 2004-US9947 W 20040331

AB The invention relates to pharmaceutical compns. comprising propylene glycol solvates of active pharmaceutical ingredients (APIs) which are hygroscopic or has low aqueous solubility. The composition comprises solvate characterized by (i) the mole ratio of propylene glycol to API in the range of 0.25 to 2; (ii) a crystalline form, (iii) a powder X-ray diffraction spectrum which differs from the corresponding powder X-ray diffraction spectrum of the unsolvated API by at least one property, (iv) stability to temps. of up to 50° under a stream of gas in a thermogravimetric anal. apparatus, (v) the API is optionally in the form of a metal salt, such as an alkali or an alkaline earth metal salt, (vi) the API has low aqueous solubility and

is selected from steroid drugs, and (vii) the composition further comprises a pharmaceutically-acceptable diluent, excipient or carrier. A method for preparing a propylene glycol solvate of an API comprises (a) contacting propylene glycol with an API in solution, (b) crystallizing a propylene glycol solvate of the API from the solution, and (c) isolating the solvate. For example, to a solution of celecoxib (253 mg, 0.664 mmol) in di-Et ether (6 mL) was added propylene glycol (0.075 mL, 102 mmol). To the clear solution was added potassium t-butoxide in THF (1 M, 0.66 mL, 0.66 mmol). Crystals immediately began to form and after 5 min the solid had completely crystallized The crystalline salt form was found to be a 1:1 propylene glycol solvate of celecoxib potassium salt.

IT 724433-99-2P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation and compns. of propylene glycol solvates with hygroscopic or low soluble drugs)

RN 724433-99-2 HCAPLUS

1,2-Propanediol, compd. with 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (1:?) (CA INDEX NAME)

CM 1

CN

CRN 132539-06-1 CMF C17 H20 N4 S

CM 2

CRN 57-55-6 CMF C3 H8 O2

$$^{\rm OH}_{\rm H_3C-\,CH-\,CH_2-\,OH}$$

IT 132539-06-1, Olanzapine

RL: RCT (Reactant); RACT (Reactant or reagent) (preparation and compns. of propylene glycol solvates with hygroscopic or low soluble drugs)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

```
L27 ANSWER 61 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2004:566619 HCAPLUS
                           141:128822
DOCUMENT NUMBER:
TITLE:
                           Methods for the preparation of olanzapine
                           hydrate and solvate crystal forms
INVENTOR(S):
                           Dolitzky, Ben Zion; Aronhime, Judith; Diller, Dov
PATENT ASSIGNEE(S):
                           Teva Pharmaceutical Industries Ltd., Israel; Teva
                           Pharmaceuticals USA, Inc.
SOURCE:
                           PCT Int. Appl., 36 pp.
                           CODEN: PIXXD2
DOCUMENT TYPE:
                           Patent
LANGUAGE:
                           English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
                          AINU DATE APPLICATION NO.
     PATENT NO.
                       KIND DATE
                                                                        DATE
                                               ______
                           A1 20040715
A9 20040819
                                               WO 2003-US41123
                                                                        20031224
     WO 2004058773
     WO 2004058773
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
         PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
              BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
              TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2003300324 A1 20040722 AU 2003-300324 20031224
                                              US 2003-746698
     US 20040198721
                           A1 20041007
                                                                          20031224
     US 7323459
                           B2 20080129
     EP 1575962
                           A1 20050921
                                               EP 2003-814357
                                                                          20031224
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     US 20070129352
                        A1 20070607
                                                US 2007-649441 20070103
                                                                    P 20021224
PRIORITY APPLN. INFO.:
                                                US 2002-435913P
                                                US 2003-746698
                                                                    A1 20031224
                                                                  W 20031224
                                                WO 2003-US41123
AB
     A series of novel crystalline olanzapine forms are prepared
     and described, in particular hydrated (e.g., olanzapine
     dihydrate) and solvated crystalline forms of
     olanzapine (e.g., olanzapine isobutanol solvate).
ΙT
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IT 205485-16-1P, Olanzapine dihydrate 722455-81-4P 722455-82-5P 722455-83-6P

722455-84-7P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (methods for the preparation of olanzapine hydrate and solvate crystal forms)

RN 205485-16-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine,

2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:2) (CA INDEX NAME)

●2 H2O

RN 722455-81-4 HCAPLUS
CN 1-Propanol, 2-methyl-, compd. with
2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine
(1:?) (CA INDEX NAME)

CM 1

CRN 132539-06-1 CMF C17 H20 N4 S

CM 2

CRN 78-83-1 CMF C4 H10 O

$$^{{\rm CH_3}}_{|}$$
 $_{{\rm H_3C-CH-CH_2-OH}}^{{\rm CH_3}}$

RN 722455-82-5 HCAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,
2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (2:3) (CA INDEX NAME)

●3/2 H₂O

RN 722455-83-6 HCAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,
2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:3) (CA INDEX NAME)

●3 H₂O

RN 722455-84-7 HCAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,
2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (4:3) (CA INDEX NAME)

●3/4 H₂O

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

INVENTOR(S):

L27 ANSWER 62 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

2004:546512 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 141:111569

TITLE: A process for the preparation of a pharmaceutically

> pure polymorphic form of olanzapine Majka, Zbigniew; Stawinski, Tomasz

PATENT ASSIGNEE(S): Adamed Sp. Z O.O., Pol. SOURCE: PCT Int. Appl., 17 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION: DATENT NO

PA:	ΓΕΝΤ	NO.			KIND DATE			APPLICATION NO.						D	ATE			
WO	2004	0568	 33		A1	_	2004	0708							2	0031	215	
	W:	ΑE,	ΑG,	AL,	ΑM,	AT,	ΑU,	ΑZ,	ΒA,	BB,	ВG,	BR,	BW,	ΒY,	BZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	
		NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ΤJ,	
		TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	
		BY,	KG,	KZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	ВG,	CH,	CY,	CZ,	DE,	DK,	EE,	
		ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	ΙT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	
		TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG
	2506						2004											
	2003																	
EP	1581	537			A1		2005	1005		EP 2	003-	7680	31		2	0031	215	
EP	1581	537			В1		2007	1121										
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	ВG,	CZ,	EE,	HU,	SK		
BR	2003																	
CN	1729	195			A		2006	0201		CN 2	003-	8010	6963		2	0031	215	
CN	1003	5428	0		С		2007	1212										
								ES 2003-768031						2	0031	215		
NO 2005003368					А	A 20050711			1 NO 2005-3368						2	0050	711	
IORIT	ORITY APPLN. INFO.:								PL 2002-357928						A 2	0021	220	
										WO 2	003-	IB59	31		W 2	0031	215	

- AB A process for the preparation of pharmaceutically pure polymorphic form I of olanzapine comprises crystallization of olanzapine from a solution in methylene chloride, wherein before the crystallization, the solution of olanzapine in methylene chloride is treated with silica gel, preferably at reflux temperature Also disclosed is the form I of olanzapine substantially free of a chloromethyl analog.impurity of olanzapine as well as a process for removing the impurity from the polymorphic form I. Thus, 400 g olanzapine was treated with 300 mL methylene chloride and silica gel was added to the solution and the mixture heated. After cooling to 0° , the olanzapine was filtered off and shown to be 99.92% pure.
- 132539-06-1P, Olanzapine

RL: PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (process for preparation of pharmaceutically pure polymorphic form

of olanzapine)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 63 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:203552 HCAPLUS

DOCUMENT NUMBER: 140:253583

TITLE: Process of preparation of olanzapine form I INVENTOR(S): Patel, Hiren V.; Ray, Anup K.; Patel, Pramod B.;

Patel, Mahendra R.

PATENT ASSIGNEE(S): Sandoz, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 8 pp., Cont.-in-part of U.S.

Ser. No. 160,958.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040048854	 A1	20040311	US 2003-449643	20030530
US 7297789	В2	20071120		
US 20080188465	A1	20080807	US 2007-928791	20071030
PRIORITY APPLN. INFO.:			US 2002-160958	A2 20020531
			US 2003-449643	A1 20030530

OTHER SOURCE(S): CASREACT 140:253583

Disclosed is a process for the preparation of polymorph form I of 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (olanzapine) by reacting (a) reacting 4-amino-2-methyl-10H-thieno[2,3-b][1,5]benzodiazepine hydrochloride and 1-methylpiperazine in an aprotic high boiling solvent or mixts. thereof at a temperature of between about 90 to 130°.; (b) purifying the product of step (a) in an acidic medium; (c) basifying the product of step (b) to a pH of between 7.5-9; and (d) extracting the product of step (c) using a low boiling organic solvent. Olanzapine is known as an antipsychotic agent and polymorph form I is in pharmaceutical formulations.

IT 132539-06-1P, Olanzapine

RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(process of preparation of olanzapine polymorph form I by reacting 4-amino-2-methyl-10H-thieno[2,3-b][1,5]benzodiazepine hydrochloride and 1-methylpiperazine)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L27 ANSWER 64 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2004:60321 HCAPLUS 140:117363 DOCUMENT NUMBER: Preparation of polymorphic forms of TITLE: olanzapine from its solvates Kotar, Jordan Berta; Vrecer, Franc; Grcman, Marija INVENTOR(S): PATENT ASSIGNEE(S): Krka, D.D. Novo Mesto, Slovenia PCT Int. Appl., 29 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION: KIND DATE APPLICATION NO. PATENT NO. DATE _____ _____ ____ A2 20040122 A3 20040401 WO 2003-SI24 WO 2004006933 20030714 WO 2004006933 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG A SI 21270 20040229 SI 2002-175 20020715 CA 2493370 20030714 20040122 CA 2003-2493370 A1 AU 2003-256242 A1 20040202 AU 2003256242 20030714 20050713 EP 2003-764287 EP 1551414 Α2 20030714 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK US 20060040920 A1 20060223 US 2005-521646 20050113 NO 2005000720 Α 20050210 NO 2005-720 20050210 IN 2005CN00184 20070330 IN 2005-CN184 20050214 Α PRIORITY APPLN. INFO.: SI 2002-175 A 20020715 WO 2003-SI24 W 20030714 AΒ The invention relates to a process for the preparation of form I of olanzapine, crystallized from a solvent mixture which comprises 2-propanol, some pseudopolymorphic forms, namely solvates of olanzapine, a new polymorphic form A of olanzapine, and processes for the preparation thereof. For example, form A of olanzapine was prepared by suspending 10.0g olanzapine in 30 mL acetonitrile, adding 35mL methylene chloride in heated suspension, and drying under vacuum at 600C. 132539-06-1, Olanzapine ΙT RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(polymorphism; preparation of polymorphic forms of

10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-

olanzapine from its solvates)

132539-06-1 HCAPLUS

(CA INDEX NAME)

RN CN

IT 647825-99-8 647826-00-4 647826-01-5 647826-02-6 647826-03-7 647826-04-8

RL: FMU (Formation, unclassified); PRP (Properties); FORM (Formation, nonpreparative)

(preparation of polymorphic forms of olanzapine from its solvates)

RN 647825-99-8 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-, compd. with acetonitrile and dichloromethane, hydrate (9CI) (CA INDEX NAME)

CM 1

CRN 132539-06-1 CMF C17 H20 N4 S

CM 2

CRN 75-09-2 CMF C H2 Cl2

 ${\tt Cl-CH}_2{\tt -Cl}$

CM 3

CRN 75-05-8 CMF C2 H3 N

 $_{\mathrm{H3C-C}}=\mathrm{N}$

RN 647826-00-4 HCAPLUS CN 10H-Thieno[2,3-b][1,5]benzodiazepine,

2-methyl-4-(4-methyl-1-piperazinyl)-, acetonitrile, hydrate (2:1:4) (CA INDEX NAME)

CM 1

CRN 132539-06-1 CMF C17 H20 N4 S

CM 2

CRN 75-05-8 CMF C2 H3 N

 $H_3C-C \equiv N$

RN 647826-01-5 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-, compd. with acetonitrile and dichloromethane (6:3:1), hexahydrate (9CI) (CA INDEX NAME)

CM 1

CRN 132539-06-1 CMF C17 H20 N4 S

CM 2

CRN 75-09-2 CMF C H2 C12

${\tt Cl-CH_2-Cl}$

CM 3

CRN 75-05-8 CMF C2 H3 N

$_{\mathrm{H3C-C}} = \mathrm{N}$

RN 647826-02-6 HCAPLUS

CN 2-Propanol, compd. with 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (1:2) (CA INDEX NAME)

CM 1

CRN 132539-06-1 CMF C17 H20 N4 S

CM 2

CRN 67-63-0 CMF C3 H8 O

RN 647826-03-7 HCAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,
2-methyl-4-(4-methyl-1-piperazinyl)-, dichloromethane (2:1) (CA INDEX NAME)

CM 1

CRN 132539-06-1 CMF C17 H20 N4 S

CM 2

CRN 75-09-2 CMF C H2 C12

${\tt Cl-CH}_2{\tt -Cl}$

RN 647826-04-8 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-, dichloromethane (6:1) (CA INDEX NAME)

CM 1

CRN 132539-06-1 CMF C17 H20 N4 S

CM 2

CRN 75-09-2 CMF C H2 C12

 ${\tt Cl-CH}_2{\tt -Cl}$

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD

(5 CITINGS)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 65 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:1002481 HCAPLUS

DOCUMENT NUMBER: 140:278676

TITLE: 2-Methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-

b][1,5]benzodiazepine methanol solvate

AUTHOR(S): Wawrzycka-Gorczyca, Irena; Mazur, Liliana; Koziol,

Anna E.

CORPORATE SOURCE: Faculty of Chemistry, Maria Curie-Sklodowska

University, Lublin, 20031, Pol.

SOURCE: Acta Crystallographica, Section E: Structure Reports

Online (2004), E60(1), o69-o71 CODEN: ACSEBH; ISSN: 1600-5368

PUBLISHER: International Union of Crystallography

DOCUMENT TYPE: Journal; (online computer file)

LANGUAGE: English

AB The title compound, C17H20N4S·CH4O, is an olanzapine 1:1 MeOH solvate. Crystallog. data are given. A pair of olanzapine mols. forms a centrosym. dimer with intermol. C-H... π interactions. Intermol. host-host N-H...N H bonds were not found. The guest mol. is

linked to host mols. through O-H...N, N-H...O and C-H...O H bonds.

IT 182808-49-7

RL: PRP (Properties)

(crystal structure of)

RN 182808-49-7 HCAPLUS

CN Methanol, compd. with 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (1:1) (CA INDEX NAME)

CM 1

CRN 132539-06-1 CMF C17 H20 N4 S

CM 2

CRN 67-56-1 CMF C H4 O

 ${\tt H3C-OH}$

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 66 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

2003:1002480 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 140:278675

TITLE: Polymorphic form II of

2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-

b][1,5]benzodiazepine

AUTHOR(S): Wawrzycka-Gorczyca, Irena; Koziol, Anna E.; Glice,

Magdalena; Cybulski, Jacek

CORPORATE SOURCE: Faculty of Chemistry, Maria Curie-Sklodowska

University, Lublin, 20031, Pol.

SOURCE: Acta Crystallographica, Section E: Structure Reports

Online (2004), E60(1), o66-o68CODEN: ACSEBH; ISSN: 1600-5368

PUBLISHER: International Union of Crystallography

DOCUMENT TYPE: Journal; (online computer file)

English LANGUAGE:

The title compound, C17H20N4S, generic name olanzapine, is an antipsychotic agent. Crystallog. data are given. The mol. consists of three fused rings (benzene, diazepine and thiophene) and an

N-methylpiperazine substituent. The boat conformation of the central 1,5-diazepine ring defines the overall shape of the mol. butterfly-like mols. form centrosym. dimers stabilized by $C-H...\pi$ interactions between their cavities. The dimers are connected by

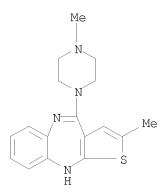
intermol. N-H...N, C-H...N and C-H...S H bonds.

132539-06-1, Olanzapine ΙT RL: PRP (Properties)

(crystal structure of polymorph of)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)



THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD OS.CITING REF COUNT: 5

(5 CITINGS)

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L27 ANSWER 67 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:991519 HCAPLUS
                               140:42213
DOCUMENT NUMBER:
                               Preparation of the antipsychotic agent
TITLE:
                               2-ethyl-10-(4-methyl-1-piperazinyl)-4H-thieno[2,3-
                               b][1,5]benzodiazepine
INVENTOR(S):
                              Browder, Monte R.
                              Ivax Corporation, USA
PATENT ASSIGNEE(S):
                               PCT Int. Appl., 26 pp.
SOURCE:
                               CODEN: PIXXD2
DOCUMENT TYPE:
                               Patent
LANGUAGE:
                               English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
      PATENT NO.
                             KIND DATE
                                                    APPLICATION NO.
                             ____
                                                     ______
      WO 2003104239
                              A1 20031218 WO 2003-US17550
                                                                                  20030603
           W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG
                BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                          A1 20031222 AU 2003-239967 20030603
      AU 2003239967
                              A1 20040401
                                                      US 2003-453082
                                                                                   20030603
      US 20040063694
                                                      US 2002-386126P P 20020605
WO 2003-US17550 W 20030603
PRIORITY APPLN. INFO.:
      2-Ethyl-10-(4-methyl-1-piperazinyl)-4H-thieno[2,3-b][1,5]benzodiazepine,
AΒ
      (I; m.p. 203-206°) prepared by reacting
      2-amino-3-cyano-5-ethylthiophene with 2-fluoronitrobenzene followed by
      reaction of the intermediate with N-methylpiperazine, and its use in the
      treatment of CNS disorders including schizophrenia and bipolar disorders,
      is described; a I X-ray diffraction pattern and I-containing pharmaceutical
      formulations are presented. I may also be combined with other active
      ingredients, including HMG CoA reductase inhibitors such as lovastatin or
      simvastatin, and/or antidepressants such as fluoxetine or other SSRIs, to
      form medically useful combination products useful in treating psychotic
      conditions and depression while also preventing any rise beyond the normal
      range of cholesterol levels in any subset of patients that might develop
      such a condition.
      132539-06-1, Olanzapine
ΙT
      RL: MOA (Modifier or additive use); USES (Uses)
```

(preparation of the antipsychotic agent

2-ethyl-10-(4-methyl-1-piperazinyl)-4H-thieno[2,3-b][1,5]benzodiazepine in formulation with)

132539-06-1 HCAPLUS RN

10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-CN (CA INDEX NAME)

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 68 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:972083 HCAPLUS

DOCUMENT NUMBER: 140:16753

TITLE: Process of preparation of olanzapine form I INVENTOR(S): Patel, Hiren V.; Ray, Anup K.; Patel, Pramod B.;

Patel, Mahendra R.

PATENT ASSIGNEE(S): Geneva Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 16 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

	PATENT NO.					KIN	D	DATE		APPLICATION NO.						DATE 		
	WO 2003101997			A1 2003121			1211	WO 2003-US17186										
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	ΒA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,
			PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ΤJ,	TM,	TN,	TR,	TT,
			TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW					
		RW:	GH,	GM,	ΚE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
			KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
			FΙ,	FR,	GB,	GR,	HU,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
			BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG
	AU	2003	2373	05		A1		2003	1219		AU 2	003-	2373	05		2	0030	530
	ΕP	1513	846			A1		2005	0316		EP 20		7367	71		2	0030	530
	R: AT, BE, CH				CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK	
PRIORITY APPLN. INFO.:					.:						US 2	002-	1609	58	ž	A 2	0020	531
											WO 2	003-1	US17	186	Ī	W 2	0030	530
OTHER COURCE (C) .						CACDEACT 140.16753												

OTHER SOURCE(S): CASREACT 140:16753

GΙ

AB The title compound (I), an antipsychotic agent, was prepared from 4-amino-2-methyl-10H-thieno[2,3-b][1,5]benzodiazepine hydrochloride and 1-methylpiperazine. A crystallization method yielded the polymorphic form I in 99.96% HPLC purity.

IT 132539-06-1P, Olanzapine

RL: IMF (Industrial manufacture); PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation) (preparation of olanzapine form I)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 69 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:950850 HCAPLUS

DOCUMENT NUMBER: 140:19846

TITLE: Pharmacologically active salts

INVENTOR(S): Larsen, Claus Selch

PATENT ASSIGNEE(S): Danmarks Farmaceutiske Universitet, Den.

SOURCE: PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	PATENT NO.					KIND DATE			APPLICATION NO.						DATE			
WO	WO 2003099293				A1 20031204			,	WO 2	003-	DK34:	3		2	0030	522		
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,	
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,	
		PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ΤJ,	TM,	TN,	TR,	TT,	
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW						
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,	
		KG,	KΖ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	
		FI,	FR,	GB,	GR,	HU,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,	
		BF,	ΒJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML_{\prime}	MR,	NE,	SN,	TD,	ΤG	
AU 2003227517					A1		2003	1212		AU 2	003-	2275	17		2	0030	522	
PRIORITY	PRIORITY APPLN. INFO.:									DK 2	002-	798			A 2	0020	523	
									,	WO 2	003-	DK34:	3	1	W 2	0030	522	

- AB Novel salts formed between 2 active drug substances, wherein the first drug substance is an NSAID drug substance containing a carboxylic acid group and the second drug substance contains an amine group and is a local anesthetic or selected from the group consisting of nonopioid analgesics, antipsychotics, antidepressants, narcotic antagonists and local anesthetics. Such salts that are poorly soluble in tissue fluids are feasible for injectable prolonged release formulations, where the NSAID addnl. to minimize pain and tissue reaction at the site of administration. Thus, a salt was prepared by the reaction of the free base, bupivacaine with diflunisal in acetone. The solubility and dissoln. profiles of the salt were determined
- IT 132539-06-1, Olanzapine
 - RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of pharmacol. active salts)
- RN 132539-06-1 HCAPLUS
- CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

REFERENCE COUNT:

9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 70 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:931370 HCAPLUS

DOCUMENT NUMBER: 139:399740

TITLE: Methods for preparation of olanzapine

polymorphic form i

INVENTOR(S): Piechaczek, Janina; Glice, Magdalena; Fraczek,

Urszula; Serafin, Jadwiga; Szelejewski, Wieslaw;

Soltysiak, Krzysztof

PATENT ASSIGNEE(S): Institut Farmaceutyczny, Pol.

SOURCE: PCT Int. Appl., 31 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

P.	PATENT NO.				KIND DATE			APPLICATION NO.						DATE				
WC	WO 2003097650				A1 20031127			WO 2003-PL44						2	 0030	 516		
	V	₹ .	ΑT,	ΑU,	BA,	BG,	BR,	BY,	CA,	CH,	CN,	CZ,	EE,	ES,	FI,	GB,	HR,	HU,
			IL,	IN,	JP,	KP,	KR,	KΖ,	LT,	LU,	LV,	MD,	MK,	MX,	NO,	NΖ,	PL,	PT,
			RO,	RU,	SE,	SK,	TR,	UA,	US,	UZ,	YU,	ZA						
	F	₹W:	ΑM,	AZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,
			DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	RO,	SE,
			SI,	SK,	TR													
PI	19	9683	14			В1		2008	0229		PL 2	002-	3539	89		2	0020	517
JA	J 20	0032	2512	47		A1		2003	1202		AU 2	003-	2512	47		2	0030	516
E	2 15	5095	531			A1		2005	0302		EP 2	003-	7529	52		2	0030	516
	F	₹:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	SI,	LT,	LV,	FΙ,	RO,	MK,	CY,	TR,	BG,	CZ,	EE,	HU,	SK		
US	5 20	050	0239			A1		2005									0050	620
US	3 75	5382	213			В2		2009	0526									
PRIORIT	ΓΥ P	APPI	_N.	INFO	. :						PL 2	002-	3539	89		A 2	0020	517
											WO 2	003-	PL44		,	W 2	0030	516

- AB The invention relates to the methods for preparation of olanzapine polymorphic Form I. The invention also relates to the new mixed solvates of olanzapine constituting valuable intermediates used in the preparation of substantially pure olanzapine polymorphic Form I.
- IT 132539-06-1P, Olanzapine

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(methods for preparation of olanzapine polymorphic form
i)

- RN 132539-06-1 HCAPLUS
- CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 71 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:875295 HCAPLUS

DOCUMENT NUMBER: 139:354500

TITLE: Novel crystalline polymorph form

VI of olanzapine and a process for its

preparation

INVENTOR(S): Reguri, Buchi Reddy; Chakka, Ramesh

PATENT ASSIGNEE(S): Reddy's Laboratories Limited, India; Cord, Janet I.

SOURCE: PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.					KIND DATE		APPLICATION NO.						DATE			
					A1 20031106			WO 2	003-	US12	414		2	0030			
WC) 200	30912	60		A9		2004	0603									
	W:	ΑE,	ΑG,	ΑL,	ΑM,	ΑT,	ΑU,	ΑZ,	ΒA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NΙ,	NO,	NZ,	OM,
		PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW					
	RW	: GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	KΖ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI,	FR,	GB,	GR,	HU,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG
11	1 200	2MA00	311		A		2005	0304		IN 2	002-1	MA31	1		2	0020	423
JA	J 200	32431	.53		A1		2003	1110		AU 2	003-	2431	53		2	0030	422
US	5 200	50153	954		A1		2005	0714		US 2	004-	5094	73		2	0040	929
PRIORIT	ΓΥ AP	PLN.	INFO	.:						IN 2	002-1	MA31	1		A 2	0020	423
										WO 2	003-1	US12	414	1	W 2	0030	422

- AB A novel crystalline form of 2-methyl-4-(4-methyl-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (olanzapine), which has a defined X-ray diffraction pattern, is prepared and to its preparation by dissolving olanzapine in a C1-6 alkanol at 0-40° for 30 min to 10 h, isolating the product, and drying it at 40-100°. The olanzapine crystal polymorph is useful for the treatment of CNS disorders (no data).
- IT 132539-06-1, Olanzapine

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(novel crystalline polymorph form VI of

olanzapine and a process for its preparation)

- RN 132539-06-1 HCAPLUS
- CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AUTHOR(S):

L27 ANSWER 72 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:681542 HCAPLUS

DOCUMENT NUMBER: 140:10936

TITLE: 2-Methyl-4-(4-methylpiperazin-1-yl)-10H-thieno[2,3-

b][1,5]benzodiazepine methanol solvate monohydrate Capuano, Ben; Crosby, Ian T.; Fallon, Gary D.; Lloyd,

Edward J.; Yuriev, Elizabeth; Egan, Simon J.

CORPORATE SOURCE: Victorian College of Pharmacy, Department of Medicinal

Chemistry, Monash University (Parkville Campus),

Victoria, 3052, Australia

SOURCE: Acta Crystallographica, Section E: Structure Reports

Online (2003), E59(9), o1367-o1369 CODEN: ACSEBH; ISSN: 1600-5368

PUBLISHER: International Union of Crystallography

DOCUMENT TYPE: Journal; (online computer file)

LANGUAGE: English

AB The thienobenzodiazepine nucleus of the title compound, olanzapine MeOH solvate monohydrate, C17H20N4S·CH4O·H2O, is buckled,

with the central seven-membered heterocycle in a boat conformation and the dihedral angle between the planes of the aromatic rings being 118°.

The piperazine ring displays an almost perfect chair conformation with the Me group assuming an equatorial orientation. The relative position of the thienobenzodiazepine and piperazine ring system is controlled by the planarity of the piperazine N in the amidine moiety. Crystallog. data are

given.

IT 628722-44-1

RL: PRP (Properties)

(crystal structure of)

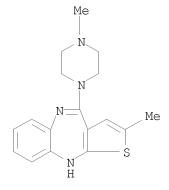
RN 628722-44-1 HCAPLUS

CN Methanol, compd. with 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-methyl-1-piperazinyl)

b][1,5]benzodiazepine, hydrate (1:1:1) (CA INDEX NAME)

CM 3

CRN 132539-06-1 CMF C17 H20 N4 S



CM 2

CRN 67-56-1 CMF C H4 O

 $_{
m H3C-OH}$

IT 132539-06-1

RL: PRP (Properties)
 (mol. structure of)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD

(3 CITINGS)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

PUBLISHER:

L27 ANSWER 73 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

2003:657203 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 140:70035

TITLE: Pharmacogenetic and pharmacogenomic research in

psychiatry: current advances and clinical applications Arranz, Maria J.; Mancama, Dalu T.; Kerwin, Robert W. AUTHOR(S): CORPORATE SOURCE: Clinical Neuropharmacology, Institute of Psychiatry,

KCL, London, SE5 8AF, UK

SOURCE: Current Pharmacogenomics (2003), 1(3), 151-158

> CODEN: CPUHAC; ISSN: 1570-1603 Bentham Science Publishers Ltd.

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

A review. After more than 50 yr of investigations, pharmacogenetic efforts have crystallized in several findings relating genetically determined pharmacokinetic and pharmacodynamic factors to treatment response. Metabolic enzymes and neurotransmitter proteins contain genetic polymorphisms that alter their interaction with psychotropic drugs and contribute to response variability. This knowledge can be used to predict clin. results and adverse reactions. Current clin. applications include rapid methods for the characterization of metabolic status that is used in clin. trials for the identification of individuals susceptible to side-effects. This practice is being extended to clin. labs. to avoid toxic reactions to specific treatments. Pharmacogenetics methods for the pre-treatment prediction of clin. response to the antipsychotic drugs clozapine, risperidone, olanzapine and haloperidol are in development and expected to be available for clin. use in the next decade. However, much is still expected from the wealth of information produced by pharmacogenomic research. Pharmacogenomic strategies, including large scale functional studies in brain areas related to the etiol. of mental disorders, will increase the knowledge on therapeutic mechanisms and identify novel targets. Pharmacogenomic advances will be translated into more specific and safer drugs and tailoring of drug prescription according to the patient's genetic susceptibilities. Pharmacogenetic and pharmacogenomic investigations have the potential to transform psychiatric treatment in the next decades.

THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD OS.CITING REF COUNT: (4 CITINGS)

REFERENCE COUNT: 99 THERE ARE 99 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L27 ANSWER 74 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:512084 HCAPLUS

DOCUMENT NUMBER: 139:74001

TITLE: Preparation of crystalline form I of

olanzapine

INVENTOR(S): Chhabada, Vijay Chhangamal; Rehani, Rajeev Budhdev;

Thennati, Rajamamannar

PATENT ASSIGNEE(S): Sun Pharmaceutical Industries Limited, India

SOURCE: U.S. Pat. Appl. Publ., 6 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.				KIND DATE			APPLICATION NO.					DATE					
US	2003	0125	322		A1	_	2003	0703		 US 2	002-	3263	97		2	0021	223
US	6906	062			В2		2005	0614									
CA	2471	341			A1		2003	0710		CA 2	002-	2471.	341		2	0021	223
WO	2003	0554	38		A2		2003	0710		WO 2	002-	IN24	1		2	0021	223
WO	2003	0554	38		АЗ		2003	0814									
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NΖ,	OM,	PH,
		PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,
		UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW						
	RW:	GH,	GM,	KΕ,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	KΖ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG		
AU	2002	3671	19		A1		2003	0715		AU 2	002-	3671	19		2	0021	223
EP	1470	130			Α2		2004	1027		EP 2	002-	8058	71		2	0021	223
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FΙ,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	SK		
JP	2005	5131	44		${ m T}$		2005	0512		JP 2	003-	5560	17		2	0021	223
СН	6958	62			A5		2006	0929		CH 2	002-	2198			2	0021	223
BE	1015	037			Α6		2004	0803		BE 2	002-	744			2	0021	224
RIORIT	Y APP	LN.	INFO	.:						IN 2	001-	MU12	11	Ž	A 2	0011	224
										WO 2	002-	IN24	1	Ţ	W 2	0021	223

AB Crystalline Form I of olanzapine is characterized by x-ray powder diffraction IR absorbance bands. The compound has a stable color at ambient conditions of storage and its preparation comprises at least 2repetitive steps of crystallization from 1 or more organic solvents by dissolving olanzapine in the solvent and allowing crystn . to occur. In at least 1 step the solution is purified by treating with a solid adsorbent material and filtering, and in the last step the crystallinematerial is subjected to drying. Olanzapine along with 0.75 L of absolute ethanol is stirred at 30°. The contents of the flask are gradually heated to $77-78\,^\circ$ to obtain a clear solution and then stirred for 15 mins at $77-78\,^\circ$. Gradually it was allowed to cool to $55-57^{\circ}$. During the process of cooling to $55-57^{\circ}$ the solution is seeded with olanzapine Form I at an interval of every 5° until the seed remains undissolved. The contents are further cooled to $30-34^{\circ}$ and then to 10° . The solid product is filtered and washed with chilled absolute alc. and sucked dry. The product is

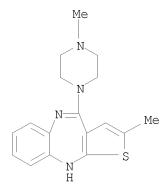
dried under vacuum at $47-50^{\circ}$ until constant weight to obtain 33 g (yield 66% weight/weight) of Form 1.

IT 132539-06-1P, Olanzapine

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PUR (Purification or recovery); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses) (preparation of crystalline form I of olanzapine)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 75 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:501679 HCAPLUS

DOCUMENT NUMBER: 139:299379

TITLE: Anhydrates and Hydrates of Olanzapine:

Crystallization, Solid-State Characterization,

and Structural Relationships

AUTHOR(S): Reutzel-Edens, Susan M.; Bush, Julie K.; Magee, Paula

A.; Stephenson, Greg A.; Byrn, Stephen R.

CORPORATE SOURCE: Eli Lilly and Company, Indianapolis, IN, 46285, USA

SOURCE: Crystal Growth & Design (2003), 3(6), 897-907

CODEN: CGDEFU; ISSN: 1528-7483

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

Olanzapine, a novel benzodiazepine agent used in the treatment of schizophrenia and related psychoses, crystallizes in 25+ crystal forms, seven of which are pharmaceutically relevant: three anhydrates (I-III), three dihydrates (B, D, and E), and a higher hydrate. X-ray crystal structures of the thermodynamically stable anhydrous form (I), two dihydrates (B and D), a higher hydrate, and a Rietveld-refined structure of dihydrate E have permitted a detailed anal. of the conformational, H bonding, and crystal packing preferences of olanzapine. Crystallog. data are given. The symmetry and H-bonding interactions in the crystal forms also were characterized by 13C and 15N CP/MAS NMR spectroscopy. Using the crystallog. and spectroscopic data, significant structural relations were identified between the crystal forms of olanzapine. The present study demonstrates the utility of integrating crystallog., spectroscopy, and crystal modeling in detailed structural studies of polymorphism (and solvate formation) and for rationalizing crystallization outcomes. polymorphism and hydrate formation can be used to optimize the phys. presentation of pharmaceutical solids.

IT 132539-06-1, Olanzapine 205485-16-1, Olanzapine dihydrate 585571-52-4,

Olanzapine hydrate (2:5)

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process)

(crystallization and crystal structure of)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

RN 205485-16-1 HCAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,
2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:2) (CA INDEX NAME)

●2 H₂O

RN 585571-52-4 HCAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,
2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (2:5) (CA INDEX NAME)

●5/2 H₂O

OS.CITING REF COUNT: 24 THERE ARE 24 CAPLUS RECORDS THAT CITE THIS RECORD (24 CITINGS)

REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 76 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:356454 HCAPLUS

DOCUMENT NUMBER: 138:358414

TITLE: Olanzapine dihydrate II

preparation and use for treating CNS disorders

INVENTOR(S): Cord, Janet I.; Reddy, Reguri Buchi; Ramesh, Chakka

PATENT ASSIGNEE(S): Dr. Reddy's Laboratories Ltd., India

SOURCE: PCT Int. Appl., 17 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.					KIND DATE			APPLICATION NO.						DATE					
	WO	2003	 0379	03		A1		2003	0508		WO 2	002-	us34	 701		2	0021	029		
		W:						AU,												
								DK,												
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,		
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,		
			PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,		
								YU,												
		RW:						${ m MZ}$,												
								TM,												
								ΙΤ,								BF,	ВJ,	CF,		
			CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG	_				
	IN	2001	MA00	8.7.7		A		2005	0304		IN 2	001-	MA87	7		2	0011	029		
	CA	2464	306	0.0		AI 20030508					CA 2002-2464306						20021029			
	AU 2002340328					AI		2003	0512		AU 2002-340328						20021029			
	EP	1440	01MA00877 A 20050304 IN 2001-MA877 64306 A1 20030508 CA 2002-2464306 02340328 A1 20030512 AU 2002-340328 40074 A1 20040728 EP 2002-778677 : AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL							NTT	Δ ΩΠ	UUZI	UZ9							
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	RL:	FMU	(Fo	rmat:	ion,	unc.	lass	ifie	d); 1	PRP	(Pro	pert.	ies)	; THU	J (T	hera	peut	ic		
	use	e); B	IOL	(Bio	logi	cal s	stud	ly);	FORM	(Fo	rmat	ion,	non	prepa	arat	ive)	; US	ES		
	(Us	ses)																		
		(ola	nzap	ine d	dihy	drate	e II	pre	para	tion	and	use	for							
		trea	ting	CNS	dis	orde	rs)													
RN		2539-																		
CN		I-Thi				,5]b	enzc	diaz	epin	e, 2	-met:	hyl-	4-(4	-met]	nyl-	1-pi	pera	zinyl)-		

IT 205485-16-1P, 10H-Thieno[2,3-b][1,5]benzodiazepine,
 2-methyl-4-(4-methyl-1-piperazinyl)-, dihydrate
 RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);
 BIOL (Biological study); PREP (Preparation); USES (Uses)
 (olanzapine dihydrate II preparation and use for
 treating CNS disorders)
RN 205485-16-1 HCAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,
 2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:2) (CA INDEX NAME)

●2 H₂O

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 77 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:850326 HCAPLUS

DOCUMENT NUMBER: 137:329496

TITLE: Pharmaceutical compositions containing new

polymorphic forms of olanzapine and

uses thereof

INVENTOR(S): Hamied, Yusuf K.; Kankan, Rajendra N.; Rao, Dharmaraj

R.

PATENT ASSIGNEE(S): India

SOURCE: U.S. Pat. Appl. Publ., 16 pp., Cont.-in-part of U.S.

6,348,458. CODEN: USXXCO

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20020165225	A1	20021107	US 2001-26949	20011227
US 7022698	В2	20060404		
IN 187439	A1	20020427	IN 1999-BO977	19991228
IN 1999BO00972	A	20050304	IN 1999-BO972	19991228
US 6348458	В1	20020219	US 2000-540749	20000331
ZA 2002005228	A	20030630	ZA 2002-5228	20020628
PRIORITY APPLN. INFO.:			IN 1999-BO972	A 19991228
			IN 1999-BO977	A 19991228
			US 2000-540749	A2 20000331
			WO 2000-GB4982	A 20001222

- AB Pharmaceutical compns. containing form III, form IV, form V olanzapine and/or pharmaceutically acceptable salts thereof. The pharmaceutical compns. are useful for the treatment of psychotic conditions, mild anxiety and gastrointestinal conditions. In particular, the compns. are useful for treating schizophrenia and related disorders, acute mania, bipolar I disorder, psychotic mood disorder and psychosis in patients with Alzheimer's disease.
- IT 132539-06-1, Olanzapine 132539-06-1D, Olanzapine, salts
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical compns. containing new polymorphic forms of olanzapine and uses thereof)
- RN 132539-06-1 HCAPLUS
- CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

RN 132539-06-1 HCAPLUS CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L27 ANSWER 78 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2002:594852 HCAPLUS DOCUMENT NUMBER: 137:145611 Crystal forms of olanzapine TITLE: INVENTOR(S): Davies, Julian; Gano, James Edward PATENT ASSIGNEE(S): Geneva Pharmaceuticals, Inc., USA SOURCE: PCT Int. Appl., 10 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent English LANGUAGE: FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION: APPLICATION NO. PATENT NO. KIND DATE DATE ____ _____ _____ A2 20020808 WO 2001-US50627 20011220 WO 2002060906 A3 20030123 A8 20040129 WO 2002060906 WO 2002060906 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, W: AE, AG, AL, AM, AI, AU, AZ, BA, BB, BG, BR, BI, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IF, IT, LU, MC, NL, PT, SE, TR, BB, CF, CG, CI, CM, GA

US 2001-259261P P 20010104
WO 2001-US50627 W 20011220 A novel crystal form of the drug, olanzapine, AB processes for its preparation and its pharmaceutical uses are disclosed. Olanzapine was dissolved in acetone-water solution and the solvent was concentrated After filtration, the precipitate composed of yellow crystals

GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA,

132539-06-1, Olanzapine ΙT

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES

(crystal forms of olanzapine)

was dried and the m.p. was 189-190°.

GN, GQ, GW, ML, MR, NE, SN, TD, TG

A1 20020812

RN 132539-06-1 HCAPLUS

AU 2002248268

PRIORITY APPLN. INFO.:

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 79 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

2002:505442 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 137:63269

TITLE: Process for the preparation of a new crystal modification of the antipsychotic olanzapine

by crystallization from an aqueous aliphatic

lower ketone solvent

INVENTOR(S): Davies, Julian; Gano, James Edward PATENT ASSIGNEE(S): Geneva Pharmaceuticals, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 5 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20020086993	A1	20020704	US 2001-24934	20011219
US 6740753	B2	20040525		

PRIORITY APPLN. INFO.:

US 2001-259621P P 20010104

A novel crystal modification of the antipsychotic olanzapine, having a specified X-ray diffraction pattern and a m.p. in the range of $189-190^{\circ}$, is prepared by crystallizing olanzapine from an aqueous crystallization solution of a lower aliphatic

132539-06-1, Olanzapine ΙT

ketone (e.g., acetone).

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process)

(process for the preparation of a new crystal modification of the antipsychotic olanzapine by crystallization from an aqueous aliphatic lower ketone solvent)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

OS.CITING REF COUNT: THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L27 ANSWER 80 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:171904 HCAPLUS

DOCUMENT NUMBER: 136:221739

TITLE: Process for preparation of hydrates of olanzapine and their conversion into

crystalline forms of olanzapine

INVENTOR(S): Koprowski, Robert; Reguri, Buchi Reddy; Chakka, Ramesh

PATENT ASSIGNEE(S): Reddy's Laboratories Ltd., India

SOURCE: PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

P.		ENT										LICAT				D	ATE	
W												2001-				2	0010	307
		W:	•		•	,	,	,	,	,		, BG, , ES,	,	,		,		,
												, KP,						
			•	•	•	•	•	•	•	•		, MX,	•	•	•	•	•	•
			RU,	SD,	SE,	SG,	SI,	SK,	SL,	IJ,	TM	, TR,	TT,	TZ,	UA,	UG,	US,	UZ,
			VN,	YU,	ZA,	ZW	·	·	•	·		, ,	·	·	•	•		,
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ	, TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,
												, LU,						
			ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML	, MR,	NE,	SN,	TD,	TG		
I	Ν	1908	95			A1		2003	0830		ΙN	2000-1	MA71	1		2	0000	831
I.	Ν	1917	14			A1		2003	1220		ΙN	2000-1	MA70'	9		2	0000	831
C.	Α	2420	987			A1		2002	0307	1	CA	2001-	2420	987				
A	U	2001	0434	75		Α		2002	0313		AU	2001-	4347	5		2	0010	307
E	Ρ	1313	742			A1		2003	0528		ΕP	2001-	9164	49		2	0010	307
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE,	MC,	PT,
												, TR						
В	R	2001	0140	31		Α		2003	0909		BR	2001-	1403	1		2	0010	307
											HU	2003-	875			2	0010	307
		2003																
_		2004		48		Τ		2004	0311			2002-					0010	
	-	2003		26		Α		2003	0424			2003-					0030	
		2003										2003-					0030	
		2003										2003-					0030	_
		2004				A1		2004	0408			2003-					0031	
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												2001-					0010	
3 T	he	pre	sent	inv	enti	on re	elat	es t	oai	meth	od	for t	he pi	repa:	rati	on o	f hy	drates

AB The present invention relates to a method for the preparation of hydrates of olanzapine. The present invention also relates to a process for conversion of these hydrates into a pure crystalline form of olanzapine referred to as form-1. The present invention also relates to a method of converting olanzapine form-2 to form-1. Thus, a mixture of 4-amino-2-methyl-10H-thieno-[2,3-b][1,5]benzodiazepine-HCl, N-methylpiperazine, DMSO, and toluene was heated under reflux, the mixture was cooled, and water was added. The olanzapine that was separated was dried to give a product with a moisture content of 5.22%.

IT 132539-06-1P, Olanzapine 402586-77-0P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of hydrates of olanzapine and their conversion into crystalline forms of olanzapine)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

RN 402586-77-0 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:1) (CA INDEX NAME)

● H2O

IT 205485-16-1

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preparation of hydrates of olanzapine and their conversion into crystalline forms of olanzapine)

RN 205485-16-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:2) (CA INDEX NAME)

●2 H2O

THERE ARE 12 CAPLUS RECORDS THAT CITE THIS OS.CITING REF COUNT: 12 RECORD (12 CITINGS)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 81 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:136045 HCAPLUS

DOCUMENT NUMBER: 136:172816

TITLE: Polymorphic forms of olanzapine

INVENTOR(S): Hamied, Yusuf K.; Kankan, Rajendra N.; Rao, Dharmaraj

R

PATENT ASSIGNEE(S): U & I Pharmaceuticals Ltd., USA

SOURCE: U.S., 20 pp. CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PA:	TENT N	Ю.			KINI	D	DATE			APF	LIC	CAT	ION I	NO.			DATE		
US	63484	58			В1		2002												
IN	18743 1999B	9			A1		2002	0427		IN	199	99-I	3097	7		1	9991	228	
IN	1999В	0009	972		A		2005	0304		IN	199	99-I	3097	2		1	9991	228	
CA	23957	74			A1		2001	0705		CA	200	00 - 2	2395	774					
WO	20010	4793	33		A1		2001	0705		WO	200	00-0	GB49	82		2	20001	222	
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BE	3, E	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
		CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES	S, E	FΙ,	GB,	GD,	GE,	GH,	GM,	HR,	
		HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP	, E	KR,	KΖ,	LC,	LK,	LR,	LS,	LT,	
		LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX	, I	ΜZ,	NO,	NΖ,	PL,	PT,	RO,	RU,	
		SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR	₹, 5	ΓT,	TZ,	UA,	UG,	US,	UΖ,	VN,	
		YU,	ZA,	ZW															
	RW:	GH,	GM,	KΕ,	LS,	MW,	MZ,	SD,	SL,	SZ	, :	ΓZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,	
		DE,	DK,	ES,	FΙ,	FR,	GB,	GR,	ΙE,	ΙT	., I	LU,	MC,	NL,	PT,	SE,	TR,	BF,	
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GW,	ML	., l	MR,	NE,	SN,	TD,	ΤG			
AU	20010	2017	76		A		2001	0709		AU	200	01 - 2	2017	6		2	20001	222	
	77945																		
EP	12468	27			A1		2002	1009		ΕP	200	00-9	9834:	22		2	20001	222	
EP	12468	27			В1		2005	0413											
	R:												LI,	LU,	NL,	SE,	MC,	PT,	
							RO,												
DE	20023	184			U1		2003	0508		DΕ	200	00 - 2	2002	3184		2	20001	222	
	51992																20001	222	
NZ	52852	0			А		2004	0827		NΖ	200	0.0 - i	5285	20		2	20001		
	29311																		
_	22402						2005												
	20020									US	200	01 - 2	2694	9		2	20011	227	
	70226				В2		2006												
	20020				А		2003	0630									20020		
RIORIT	Y APPL	N. I	INFO	.:										2			9991		
														7			9991		
														49			20000		
													9834:		_		20001		
													5199				20001		
										-	_		GB49	-			20001	222	
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AB The invention provides 3 new polymorphic forms of olanzapine, a process for preparing the new polymorphs and pharmaceutical compns. containing the polymorphs. The new polymorphic forms of olanzapine are useful for the treatment of psychotic conditions, mild anxiety and gastrointestinal conditions. Form I olanzapine (10 g) was dissolved in a mixture of 30 mL HOAc and 30 mL water by stirring. Activated charcoal (0.5 g) was

added and the contents filtered over celite. The clear solution was maintained at 20° and 15% aqueous ammonia solution was added over a period of 30 min to adjust the pH to 8. The contents were filtered and dried to obtain Form III olanzapine (9.6 g), which was characterized by IR and XRD.

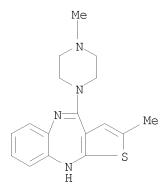
132539-06-1, Olanzapine ΙT

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES

(polymorphic forms of olanzapine)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-1(CA INDEX NAME)



OS.CITING REF COUNT: THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD 7 (7 CITINGS)

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 82 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2001:489405 HCAPLUS

DOCUMENT NUMBER: 135:76906

TITLE: Preparation and characterization of new

polymorphic crystal forms of

olanzapine

INVENTOR(S): Hamied, Yusuf Khwaja; Kankan, Rajendra Narayanrao;

Rao, Dharmaraj Ramachandra

PATENT ASSIGNEE(S): Cipla Ltd., India; Wain, Christopher, Paul

SOURCE: PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PA'	TENT	NO.			KIN	D	DATE			APPI	ICAT	ION 1	NO.		D.	ATE	
WO	2001	0479	 33		A1	_	2001	0705		WO 2	2000-	 GB49	====: 82		2	0001	222
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		CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,	GM,	HR,
		HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,	LS,	LT,
											MZ,						
		SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,
		YU,	ZA,	ZW													
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,
		DE,	DK,	ES,	FΙ,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG		
IN	1874	39			A1						999-					9991	
US	US 6348458				В1		2002	0219		US 2	-0000	5407	49		2	0000	331
CA	CA 2395774				A1		2001	0705		CA 2	-0009	2395	774		2	0001	222
AU	2001	0201	76		Α		2001	0709		AU 2	2001-	2017	6		2	0001	222
AU	7794	52			В2		2005	0127									
EP	1246	827			A1		2002	1009		EP 2	-0009	9834.	22		2	0001	222
EP	1246	827			В1		2005	0413									
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	ΑL,	TR						
NZ	5199	26			Α		2004	0227		NZ 2	-0000	5199.	26		2	0001	222
	2931										000-				2	0001	222
ZA	2002	0052	28		Α		2003	0630		ZA 2	2002-	5228			2	0020	628
IORIT	Y APP	LN.	INFO	.:							999-					9991	228
										US 2	-0000	5407	49		A 2	0000	331
										IN 1	999-	B097.	2		A 1	9991	228
										WO 2	000-	GB49	82		A 2	0001	222

GΙ

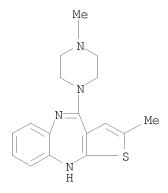
Three new polymorphic forms of 2-methyl-4-[4-methyl-1-piperazinyl]-10H-thieno[2,3-b][1,5]benzodiazepine (I; i.e., olanzapine), an antipsychotic (no data) and anxiolytic (no data), are prepared by disolving the inital I polymorph in aqueous acidic solns. (e.g., AcOH) and precipitating a different I crystal polymorph by neutralization with a base (e.g., aqueous sodium hydroxide). The new polymorphic I forms are characterized via X-ray powder diffraction and FT-IR.

IT 132539-06-1, Olanzapine
 RL: PEP (Physical, engineering or chemical process); PRP (Properties);
 PROC (Process)

(preparation and characterization of new polymorphic crystal forms of olanzapine)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 83 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1999:233761 HCAPLUS

DOCUMENT NUMBER: 130:276761

TITLE: Method for treating sexual dysfunction using

2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-

b][1,5] benzodiazepine

Van Tran, Pierre INVENTOR(S):

PATENT ASSIGNEE(S): Eli Lilly and Company, USA

SOURCE: PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	TENT				KINI		DATE			APPL						ATE	
	9916						 1999	0408								 9980	925
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		GH,	GM,	HR,	HU,	ID,	IL,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,
		LS,	LT,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	RO,	RU,	SD,	SG,
		SI,	SK,	SL,	ΤJ,	TM,	TR,	TT,	UA,	UG,	US,	UZ,	VN,	YU,	ZW		
	RW:	GH,	GM,	KΕ,	LS,	MW,	SD,	SZ,	UG,	ZW,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,
		GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG								
	2304									CA 1	998-	2304	472		1	9980	925
AU	9895 2001	834			A		1999	0423		AU 1						9980	925
JP	2001	5176	84		T		2001	1009		JP 2						9980	925
ZA	9808	840			A		2000	0328		ZA 1	998-	8840			1	9980	928
US	2002	0040	021		A1		2002	0404		US 1	998-	1623	11		1	9980	928
US	6432	943			В1		2002	0813									
EP	9110	28			A2		1999	0428		EP 1	998-	3079	50		1	9980	930
EP	9110						1999										
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	LT,	LV,	FΙ,	RO										
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	e inv		_								_		al d	ysfu	ncti	on	
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A) Preparation of the compound of the invention is described, and pharmaceutical compns. are included.

ΙT 132539-06-1D, form I

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FMU (Formation, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); FORM (Formation, nonpreparative); USES (Uses)

(thienobenzodiazepine derivative for sexual dysfunction treatment, preparation,

and compns.)

132539-06-1 HCAPLUS RN

10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-CN (CA INDEX NAME)

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(thienobenzodiazepine deriv. for sexual dysfunction treatment, prepn., and compns.

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 84 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:263237 HCAPLUS

DOCUMENT NUMBER: 128:312930

ORIGINAL REFERENCE NO.: 128:61929a,61932a

TITLE: Olanzapine for treating insomnia

INVENTOR(S):
Van Tran, Pierre

PATENT ASSIGNEE(S): Eli Lilly and Company, USA

SOURCE: U.S., 6 pp. CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5744470	A	19980428	US 1997-799052	19970210
PRIORITY APPLN. INFO.:			US 1997-799052	19970210

AB The invention provides a method for treating insomnia comprising administering an effective amount of olanzapine to an elderly patient who has been previously treated with a hypnotic agent. 2-Methyl-10H-thieno[2,3-b][1,5]benzodiazepin-4-amine·HCl was treated with N-methylpiperazine to obtain olanzapine, which was suspended in anhydrous EtOAc while heating and the product was isolated using vacuum filtration. The product was identified as Form II using x-ray powder anal. A tablet was formulated containing 1.18 % olanzapine.

IT 132539-06-1P, Olanzapine

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(olanzapine for treating insomnia)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD

(3 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 85 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:226721 HCAPLUS

DOCUMENT NUMBER: 128:261935

ORIGINAL REFERENCE NO.: 128:51767a,51770a TITLE: Olanzapine polymorph

crystal form pharmaceutical

INVENTOR(S): Bunnell, Charles Arthur; Hendriksen, Barry Arnold;

Larsen, Samuel Dean

Eli Lilly and Company, USA PATENT ASSIGNEE(S):

SOURCE: U.S., 8 pp., Cont.-in-part of U.S. Ser. No. 409,566,

abandoned. CODEN: USXXAM

Patent

DOCUMENT TYPE: LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

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US EG CA	57365 23659 22140 22140	541))05					1998 2007 1996 2001	0407 0326 1003								1	9960 9960 9960	725 321
	96303				A1		1996			WO	10	996-1	US39	17		1	9960	322
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		ES,					IS,											
			LV,				MN,											
		SG,			2.5	~ -				~-	_	~~	~ -	~	~ -	~~~		
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-	96542	-					1996 1996	-		-			5257 5427	-			9960 9960	-
	7064				A B2		1999			AU	13	990-	3427	9		1	9960	322
	96023				B2 A		1997			7. Z	1 (996_	2342			1	9960	322
	96023				A												9960	
	23138				A	19971210 GB 1997-19819										9960		
	23138				В											_		
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CN	11791	L60			А		1998	0415		CN	19	996-	1927	75		1	9960	322
CN	10655	536			С		2001	0509										
BR	9607	790			Α		1998	0707					7790				9960	322
JP	11502	2535			Τ		1999	0302		JΡ	19	996-	5295.	32		1	9960	322
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	22498				В1		2006											
	96090				A		2000			ΑT	19	996-	9021			1	9960	322
	4067	/1			В		2000					000	1065				0000	200
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CII	W: 6905		ьδ,	MW,	SD, A5		2000	1021		CII	1 (207	2245			1	9960	222
-	44248	-			В		2000			-		-	2243 8510.				9960 9960	-
	3489	0			B1		2001					997		3300			9960	
	11761	10			B1 A		2001						1176	1 0			9960	
	20428				Т		2001	0915		AΤ	10	996-	3020	0.0		1	9960	
	21593				T3		2001	1001		ES	19	996-	3020	00		1	9960	
	18372				B1		2002						3225			1	9960	
	51343				В		2002	1211		ΤW	19	996-	8510	3499			9960	
ΤW	D1343	5 4			В		ZUUZ	1211		ΤW	Τ,	ソソりー	851U.	5499		1	996U	322

АТ	251627	T	20031015	ΑТ	2000-203573		19960322
	292688	В6	20031112		1997-3000		19960322
		В1	20031230	RO	1997-1761		19960322
ES	2208220	Т3	20040616	ES	2000-203573		19960322
SK	284143	В6	20041005	SK	1997-1218		19960322
		A	20050304	IN	1996-CA514		19960322
AT	331719	T	20060715	ΑT	2003-77455		19960322
ES	2266719	Т3	20070301	ES	2003-77455		19960322
SE	9703205	A	19970905	SE	1997-3205		19970905
LV	12018	В	19980920	LV	1997-163		19970908
LT	4349	В	19980525	LT	1997-148		19970916
FΙ	9703750	A	19970922	FΙ	1997-3750		19970922
NO	9704365	A	19970922	NO	1997-4365		19970922
NO	314663	B1	20030428				
DK	9701089	A	19971112	DK	1997-1089		19970923
HK	1013988	A1	20020705	HK	1998-115175		19981223
IN	1999CA00383	A	20050311	ΙN	1999-CA383		19990423
PRIORITY	Y APPLN. INFO.:			US	1995-409566	В2	19950324
				US	1995-410474	Α	19950324
				IN	1996-CA514	АЗ	19960322
				WO	1996-US3854	W	19960322
				WO	1996-US3917	W	19960322

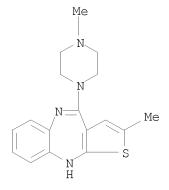
AB The invention provides Form II, a pharmaceutically elegant, stable polymorph of olanzapine, useful for treating psychotic conditions, mild anxiety and gastrointestinal conditions.

IT 132539-06-1, Olanzapine

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (form II; olanzapine polymorph crystal form pharmaceutical)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)



OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 86 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:204464 HCAPLUS

DOCUMENT NUMBER: 128:275100

ORIGINAL REFERENCE NO.: 128:54369a,54372a

TITLE: Intermediates and process for preparing

olanzapine

INVENTOR(S): Bunnell, Charles Arthur; Larsen, Samuel Dean; Nichols,

John Richard; Reutzel, Susan Marie; Stephenson,

Gregory Alan

PATENT ASSIGNEE(S): Eli Lilly and Co., USA SOURCE: Eur. Pat. Appl., 16 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
EP 831098 EP 831098 EP 831098	A2 19980325 A3 19980429 B1 20011121		19970922
R: AT, BE, CH,		GB, GR, IT, LI, LU, NL,	SE, MC, PT,
ZA 9708515	A 19990323	ZA 1997-8515	19970902
CA 2265712	A1 19980326		
CA 2265712	C 20061031		19970910
WO 9812199	A1 19980326		19970918
		BR, BY, CA, CN, CU, CZ,	EE, GE, GH,
HU, ID, IL,	IS, JP, KE, KG,	KP, KR, KZ, LC, LK, LR,	LS, LT, LV,
MD, MG, MK,	MN, MW, MX, NO,	NZ, PL, RO, RU, SD, SG,	SI, SK, SL,
TJ, TM, TR,	, - , ,	UZ, VN, YU, ZW	
		ZW, BF, BJ, CF, CG, CI,	CM, GA, GN,
	SN, TD, TG	777 1005 1101	10000010
AU 9744841	A 19980414		19970918
AU 719441 BR 9712100	B2 20000511 A 19990831		19970918
CN 1234802	A 19991110		19970918
CN 11234002 CN 1122036	C 20030924		13370310
HU 200000066	A2 20000628		19970918
HU 200000066	A3 20001128		
HU 226484	B1 20090302		
NZ 334448	A 20000825	NZ 1997-334448	19970918
JP 2001500877	T 20010123		19970918
IL 128962	A 20030112		19970918
PL 194565	B1 20070629		19970918
PL 196069	B1 20071231		19970918
PL 196068 CZ 299248	B1 20071231 B6 20080528		19970918 19970918
IN 187156	A1 20020216		19970918
AT 209208	T 20011215		19970922
ES 2166051	T3 20020401		19970922
US 6020487	A 20000201		19970923
EG 23861	A 20071118	EG 1997-986	19970923
TW 470746	В 20020101		19980227
HK 1009807	A1 20020913		19980921
NO 9901382	A 19990322	NO 1999-1382	19990322

CN

NO 323980 B1 20070730

KR 2000048520 A 20000725 KR 1999-702424 19990322 PRIORITY APPLN. INFO.: US 1996-26487P P 19960923 WO 1997-US16499 W 19970918

AB The present invention provides a process for preparing olanzapine and dihydrate polymorphs. Olanzapine was prepared from a known intermediate and later converted to its dihydrate. The x-ray powder anal. of the compound was carried out.

IT 205485-16-1P
RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(intermediates and process for preparing olanzapine)

RN 205485-16-1 HCAPLUS

10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-, hydrate (1:2) (CA INDEX NAME)

●2 H2O

IT 132539-06-1P, Olanzapine
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(intermediates and process for preparing olanzapine)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)

L27 ANSWER 87 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:204463 HCAPLUS

DOCUMENT NUMBER: 128:261934 ORIGINAL REFERENCE NO.: 128:51767a

TITLE: Crystalline olanzapine

dihydrate D for aqueous formulation

INVENTOR(S): Larsen, Samuel Dean; Nichols, John Richard; Reutzel,

Susan Marie; Stephenson, Gregory Alan

PATENT ASSIGNEE(S): Eli Lilly and Co., USA SOURCE: Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	TENT	NO.			KINI)	DATE			API	PLI	CAT	ION 1				ATE	
	8310	97			A2		1998										9970	922
EP	8310	97			A3		1998	0429										
EP	8310	97			В1		2002											
	R:						ES,	FR,	GB,	GI	₹,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
			SI,	LT,	LV,											_		
	2266						1998			CA	19	197-	2266	444		1	9970	918
	2266				C		2007	0109								_		
WO	9811						1998										9970	
	W:						BB,											
							KE,											
							MX,							SD,	SG,	SI,	SK,	SL,
							UG,											
	RW:						SZ,	UG,	ZW,	BI	₹,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,
			MR,	ΝE,	SN,													
	9744						1998			AU	19	997-	4424	1		1	9970	918
	7203	66			В2		2000											
	9711	541			A		1999			BR	19	997-	1154	1 21		1	9970	
	1234	738			А		1999			СИ	19	997-	1981.	21		1	9970	918
	1146	567			A A C		2004											
	3343	46			Α		2000							46			9970	
HU	2000	0000	65		A2		2000			HU	20	000-	65			1	9970	918
	2000		65		A3 B1		2000											
	2261				В1		2008											
	2001				T		2001							81			9970	
	1940				В1		2007							41			9970	
CZ	2992	47			В6		2008			CZ	19	999-	989				9970	
IN	2992 1997 9708	CA01	734		А		2005			ΙN	19	997-0	CA17.	34			9970	
							1999					, , ,	0012				9970	
AT	2210	74			T		2002	0815						79			9970	922
	2180	899			Т3		2003	0216		ES	19	997-	3073	79		1	9970	922
	6251	895			В1		2001	0626		US	19	997-	9358	83		1	9970	923
EG	2381	5			A		2007	0819				997-					9970	923
TW	5183	35			В		2003	0121		TW	19	997-	8611.	3833		1	9980	227
HK	1009	809			A1		2003	0509					1108				9980	921
ИО	9901	339			A		1999	0319		ИО	19	999-	1339			1	9990	319
NO	3239	79			В1		2007	0730										
KR	2000	0485	19		B1 A		2000	0725						23			9990	
IORIT	Y APP	LN.	INFO	.:										6P			9960	923
										WO	19	997-1	US16	586	1	W 1	9970	918

AB The present invention relates to the crystalline dihydrate D of olanzapine, particularly useful for preparing an aqueous formulation. The stable crystalline dihydrate D olanzapine polymorph (x-ray powder diffraction pattern given) is useful for treating psychotic patients. An oral suspension contained dihydrate D olanzapine 20 mg, Na CMC 50 mg, syrups 1.25 mL, benzoic acid solution 0.1 mL, flavors q.s., colors q.s., and water to 5 mL.

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

SOURCE:

L27 ANSWER 88 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:204419 HCAPLUS

DOCUMENT NUMBER: 128:261968

ORIGINAL REFERENCE NO.: 128:51771a,51774a

TITLE: Pharmaceutical composition containing combination of

atypical antipsychotic and serotonin reuptake

inhibitor for treatment of psychoses

INVENTOR(S): Bymaster, Franklin Porter; Perry, Kenneth Wayne;

Tollefson, Gary Dennis Eli Lilly and Co., USA Eur. Pat. Appl., 15 pp.

Eur. Pat. Appl., I

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT ASSIGNEE(S):

PA:	TENT	NO.			KINI)	DATE			API	PLI	CAT	ION 1	NO.		D	ATE	
EP	8308	6.4			A 1		1998	0325									9970	
EP	8308	64			В1		2003	0129										
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	Α,	ΙT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO											
ZA	9707	967			A		1999	0304		ZA	19	97-	7967			1	9970	904
CA	2264	941			A1		1998	0326		CA	19	97-	2264	941		1	9970	909
CA	9707 2264 2264	941			С		2008	1118										
WO	9811	897			A1		1998	0326		WO	19	97-1	JS15	874		1	9970	909
	W:						BB,											
		HU,	ID,	IL,	IS,	JP,	ΚE,	KG,	KP,	KF	Α, Ξ	KΖ,	LC,	LK,	LR,	LS,	LT,	LV,
		MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	ΡI	 	RO,	RU,	SD,	SG,	SI,	SK,	SL,
		ТJ,	TM,	TR,	TT,	UA,	UG,	US,	UZ,	V	۷,	YU,	ZW					
	RW:	GH,	KE,	LS,	MW,	SD,	SZ,	UG,	ZW,	BE	· .	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,
		ML,	MR,	NE,	SN,	TD,	ΤG											
ΑU	9744 7190 9711 1230 1162	112			A		1998	0414		ΑU	19	97-	4411	2		1	9970	909
AU	7190	33			В2		2000	0504										
BR	9711	530			A		1999	0824		BR	19	97-	1153	0		1	9970	909
CN	1230	886			Α		1999	1006		CN	19	97-	1981	13		1	9970	909
CN	1162	156			С		2004	0818										
NZ	3341 9903 9903 2001 1903	68			A		2000	0929		NZ	19	97-	3341	68		1	9970	909
HU	9903	905			A2		2000	1028		HU	19	99-	3905			1	9970	909
HU	9903	905			АЗ		2001	0328										
JΡ	2001	5030	31		T		2001	0306		JΡ	19	98-	5147	17		1	9970	909
PL	1903	74			В1		2005	1230		PL	19	97-	3324	81		1	9970	909
TW	5411	78			В		2003	0711		TW	19	97-	8611.	3280		1	9970	912
ΕP	1256	345			A1		2002	1113		ΕP	20	02 - 1	1623	8		1	9970	922
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	R,	ΙT,	LI,	LU,	NL,	SE,	PT,	ΙE,
		SI,	LT,	LV,	FΙ,	RO,	AL											
AT	2317 2191	24			T		2003	-		ΑT	19	97-	3073	75		1	9970	922
							2003							75			9970	
US	6147	072			А		2000	1114		US	19	97-	9358	72		1	9970	923
HK	1009	755			A1		2003	1024		ΗK	19	98-	1108	01		1	9980	921
ИО	9901	381			A		1999	0322		ИО	19	99-	1381			1	9990	322
ИО	3191	66			В1		2005	0627										
KR	1009 9901 3191 2000 Y APP	0485	18		А		2000	0725		KR	19	99-	7024	22		1	9990	322
RIT	Y APP	LN.	INFO	.:						US	19	96-	2688	4P		P 1	9960	923
										WΟ	19	97-1	JS15	874		W = 1	9970	909
										ΕP	19	97-	3073	75		A3 1	9970	922

AB Pharmaceutical compns. containing combination of atypical antipsychotics and serotonin reuptake inhibitors are useful for the treatment of psychoses. Form II olanzapine (I) polymorph was prepared by heating I at 76° for 30 min in Et acetate and crystallization Hard gelatin capsules contained I 25, fluoxetin hydrochloride 20, starch 150, and magnesium stearate 10 mg.

OS.CITING REF COUNT: 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 89 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

1997:650271 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 127:298752

ORIGINAL REFERENCE NO.: 127:58294h,58295a

TITLE: Olanzapine for treatment of pain

Helton, David R.; Kallman, Mary J.; Shannon, Harlan INVENTOR(S):

E.; Womer, Daniel E.

PATENT ASSIGNEE(S): Eli Lilly and Company, USA

SOURCE: PCT Int. Appl., 26 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA:	TENT						DATE									ATE		
WO	9735											 US46				 9970	324	
	W:	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	ВG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,	
		DK,	EE,	ES,	FΙ,	GB,	GE,	GH,	HU,	IL,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	
		LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	
		PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	ΤJ,	TM,	TR,	TT,	UA,	UG,	UZ,	VN,	
	RW:	GH,	ΚE,	LS,	MW,	SD,	SZ,	UG,	ΑT,	BE,	CH,	DE,	DK,	ES,	FI,	FR,	GB,	
		GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	
		ML,	MR,	ΝE,	SN,	TD,	ΤG											
CA	2248	873			A1		1997	1002		CA 1	997-	2248	873		1	9970	324	
ΑU	9723			Α		1997	1017		AU 1	997-	2340	8		1	9970	324		
ΑU	7213 9103	38			В2		2000	0629										
	R:							FR,	GB,	GR,	ΙΤ,	LI,	NL,	SE,	MC,	PT,	ΙE,	
					FI,													
CN	1219	878			А		1999											
BR	9708 9902	246			A		1999											
							2000			HU 1	999-	2723			1	9970	324	
	9902						2000											
	9903				A2		2000			HU 1	999-	3183			1	9970	324	
HU	9903	183			A3		2001								_			
US	6258 2001 9804 2000	807	^ ^		BI		2001	-							1			
JP	2001	5172	02		T		2001								1			
NO	9804	446	<i>C</i> 4		A		1998											
KK	2000	0049	64		А		2000	0125								9980	-	
KIT:	Y APP	LN.	TNF.O	.:											P 1			
										US I	996-	1413	3P		P 1 P 1	9960	325	
															PI W1			
m1.	e pre						.1											

The present invention provides a method for treating pain comprising administering an analgesic dosage of olanzapine or its polymorph. Olanzapine was prepared by reaction of 2-methyl-4-amino-10H-thieno[2,3-b][1,5]-benzodiazepine with N-methylpiperazine in DMSO. Olanzapine tablets were prepared by using a coating solution of 10% HPMC.

132539-06-1P, Olanzapine ΙT

> RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(analgesic compns. containing olanzapine)

132539-06-1 HCAPLUS RN

10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-

(CA INDEX NAME)

REFERENCE COUNT:

1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 90 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1997:650270 HCAPLUS

DOCUMENT NUMBER: 127:298751

ORIGINAL REFERENCE NO.: 127:58291a,58294a

TITLE: Method for treating migraine pain INVENTOR(S): Shannon, Harlan E.; Womer, Daniel E.

PATENT ASSIGNEE(S): Eli Lilly and Company, USA

SOURCE: PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	CENT :	NO.			KIN	D	DATE		,	APPL	ICAT	ION	NO.		D.	ATE		
WO	9735	 582			A1	_	1997	1002		WO 1	 997-	 US44	 71		1	9970.	324	
	W:	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,	
		DK,	EE,	ES,	FI,	GB,	GE,	GH,	HU,	IL,	IS,	JP,	KΕ,	KG,	KP,	KR,	KΖ,	
							LU,											
							SG,											YU
	RW:						SZ,											
							NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	
					SN,													
	2250				A1		1997	1002		CA 1	997–	2250	186		1	9970.	324	
	9725				Α		1997	1017		AU 1	997–	2584	5		1	9970.	324	
	7212																	
	1219				А		1999			CN 1	997-	1949	50		1	9970.	324	
	1106				С		2003											
	9708	-			А		1999											
	5929				А		1999	-				-	-				_	
EP	9324	-					1999											
	R:						ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	ΝL,	SE,	PT,	IE,	
					FI,													
	3320	-			A		2001											
	2001						2001			JP 1								
	1260				A		2002			IL 1								
	9804						1998			NO 1								
	2000				A		2000	0125		KR 1								
RIT	APP	LN.	INFO	.:						US 1								
										WO 1	997-	US44	71		W 1	9970.	324	

- AB The present invention provides a method for treating migraine pain comprising administering an analgesic dosage of olanzapine.

 Olanzapine was prepared and a polymorphic form prepared and characterized. Tablet formulations were given.
- IT 132539-06-1P, Olanzapine
 - RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (olanzapine compns. for treatment of migraine pain)
- RN 132539-06-1 HCAPLUS
- CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 91 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1997:632496 HCAPLUS

DOCUMENT NUMBER: 127:268052 ORIGINAL REFERENCE NO.: 127:52223a

TITLE: Olanzapine for the treatment of insomnia

INVENTOR(S): Van Tran, Pierre
PATENT ASSIGNEE(S): Eli Lilly and Co., USA
SOURCE: Eur. Pat. Appl., 12 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.								APPLICATION NO.						DATE				
	7953						1997	 0917		 EP 1	 997-	 3015	 34		1	9970	307	
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FΙ,	FR,	GB,	GR,	ΙE,	IT,	LI,	LU,	NL,	PT,	SE
ZA	9701	899			Α		1998	0907		ZA 1	997-	1899			1	9970	305	
CA	2248	758			A1		1997	0918		CA 1	997-	2248	758		1	9970	307	
WO	9733	587			A1		1997	0918		WO 1	997-	US35	92		1	9970	307	
	W:	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,	
		DK,	EE,	ES,	FI,	GB,	GE,	GH,	HU,	IL,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	
		LC,	LK,	LR,	LS,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NΖ,	PL,	PT,	
		RO,	RU,	SD,	SE,	SG,	SI,	SK,	ΤJ,	TM,	TR,	TT,	UA,	UG,	US,	UZ,	YU	
	RW:	GH,	KΕ,	LS,	MW,	SD,	SZ,	UG,	ΑT,	BE,	CH,	DE,	DK,	ES,	FΙ,	FR,	GB,	
		GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	
				ΝE,														
	9721									AU 1	997-	2198	9		1	9970	307	
	7242																	
	1212									-	997-	-				9970		
	9708				Α		1999				997-					9970		
	2000									-	997-					9970		
	3318						2000				997-					9970		
	9804				А		1998	0911			998-					9980		
RIT	Z APP	LN.	INFO	.:							996-							
											996-							
The								_			997-					9970	307	

- AB The invention discloses the use of olanzapine for treating insomnia. The preparation and polymorphic form of olanzapine were given and tablets were prepared
- IT 132539-06-1P, Olanzapine
 - RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (olanzapine for the treatment of insomnia)
- RN 132539-06-1 HCAPLUS
- CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

L27 ANSWER 92 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1997:623041 HCAPLUS

DOCUMENT NUMBER: 127:244231

ORIGINAL REFERENCE NO.: 127:47599a,47602a

TITLE: Method for treating substance abuse

INVENTOR(S): Beasley, Charles M., Jr.; Rasmussen, Kurt; Tollefson,

Gary D.

PATENT ASSIGNEE(S): Eli Lilly and Company, USA

SOURCE: PCT Int. Appl., 31 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT	NO.			KINI)	DATE		APPLICATION NO.							DATE			
WO	 9733	 586			A1	_	 1997	0918		 WO	19	 97-1	 JS34	 04		1	9970	310	
	W:	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BF	٦,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,	
		DK,	EE,	ES,	FI,	GB,	GE,	HU,	IL,	ΙS	ς,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,	
															NZ,				
															US,				
	RW:	GH,	KE,	LS,	MW,	SD,	SZ,	UG,	AT,	BE	Ξ,	CH,	DE,	DK,	ES,	FΙ,	FR,	GB,	
		GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BE	₹,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	
		ML,	MR,	NE,	SN,	TD,	TG												
CA	2248	738			A1		1997	0918		CA	19	97-	2248	738		1	9970	310	
AU	9720	672			Α		1997	1001		AU	19	97-	2067	2		1	9970	310	
AU	7259	40			В2		2000	1026											
	1213						1999	0407									9970	310	
BR	9708	037			Α		1999	0727									9970	310	
_	9903				A2		2000	0228		HU	19	99-	3502			1	9970	310	
HU	9903						2000												
EP	1007	050			A1		2000	0614		EΡ	19	997-	9088	71		1	9970	310	
EP	1007	050			В1		2005	0518											
	R:	•	•			DK,	ES,	FR,	GB,	GF	₹,	ΙΤ,	LI,	LU,	NL,	SE,	PT,	ΙE,	
		,	LT,	,															
	3318				А		2000										9970		
	2000	5172	87		T		2000										9970		
	2957	31			Τ		2005			ΑT	19	997-	9088	71		1	9970	-	
	6159						2000										9971		
-	9804				А		1998	1103									9980	-	
ORIT	Y APP	LN.	INFO	.:													9960		
										US	19	96-	1316	1P		P 1	9960		
																	9970		
Th	e inv	enti	on p	rovi	des a	a me	t.hod	for	tre	at.i	inc	າ ຣນ]	bst.a.	nce	abus	e co	mpri	sina	

AB The invention provides a method for treating substance abuse comprising administering an effective amount of olanzapine or pharmaceutically acceptable salt thereof to a patient in need thereof.

IT 132539-06-1, Olanzapine

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (olanzapine for treating substance abuse)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 93 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1997:623040 HCAPLUS

DOCUMENT NUMBER: 127:268044

ORIGINAL REFERENCE NO.: 127:52219a,52222a

TITLE: Olanzapine for treating autism and mental

retardation

INVENTOR(S): Beasley, Charles M., Jr.; Tollefson, Gary D.

PATENT ASSIGNEE(S): Eli Lilly and Company, USA; Beasley, Charles M. Jr.;

Tollefson, Gary D.

SOURCE: PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PAT	CENT 1	NO.			KIND DATE				APPLICATION NO.						DATE			
	WO 9733585					A1	WO 1996-US19576						- 1	 9961	204				
								BA,											
			DK,	EE,	ES,	FΙ,	GB,	GE,	HU,	IL,	ΙS	5, J	₽,	KE,	KG,	KP,	KR,	KΖ,	LC,
								LV,											
			RO,	RU,	SD,	SE,	SG,	SI,	SK,	ΤJ,	TN	, TI	R,	TT,	UA,	UG,	US,	UZ,	VN
		RW:						UG,											
								PT,				•							
						TD,		·	·	·		·	•	·	·	·	·	·	·
	CA	2248	741	·		A1		1997	0918	1	CA	199	6-2	2248	741		1	9961	204
	ΑU	9711	501			Α		1997	1001		AU	199	7-1	150	1		1	9961	204
	AU	7091	81			В2		1999	0826										
		1213						1999	0414	i	CN	199	6-1	802	07		1	9961	204
		9612						1999										9961	204
	ΕP	9461	79			A1		1999	1006		EΡ	199	6-9	429.	34		1	9961	204
		9461						2003	0917										
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	R, I	Γ,	LI,	LU,	NL,	SE,	PT,	IE,
				LT,				•	•	·		•			,		·		·
	HU	9903						2000	0328		HU	1999	9-3	8688			1	9961	204
		9903						2001	1228										
	JΡ	2000	5068	60		${f T}$		2000	0606		JΡ	199	7-5	325	71		1	9961	204
	NZ	3246	15			А		2000	0825		NZ	199	6-3	3246	15		1	9961	204
	ΑT	2498	32			T		2003	1015		ΑT	199	6-9	429.	34		1	9961	204
	ES	2206	614			Т3		2004	0516									9961	204
	ИО	9804	197			A		1998	1103									9980	911
PRIOF	RIT	APP:	LN.	INFO	.:						US	199	6-1	316	2P		P 1	9960	311
																		9961	
7 10	m1								£	4	:				2		-1	/	

AB The invention provides a method for treating autistic disorder and/or mental retardation comprising administering an effective amount of olanzapine (I) to a patient in need thereof. I is preferably in Form II polymorph and orally administered. I was suspended in anhydrous EtOAc, heated to 76°, cooled to 25°, and isolated using vacuum filtration. The product was identified as Form II using x-ray powder anal. I was formulated into tablets.

IT 132539-06-1P, Olanzapine

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(olanzapine for treating autism and metal retardation)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD

(4 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 94 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1997:623039 HCAPLUS

DOCUMENT NUMBER: 127:268043

ORIGINAL REFERENCE NO.: 127:52219a,52222a

TITLE: Olanzapine for treating excessive aggression INVENTOR(S): Beasley, Charles M., Jr.; Tran, Pierre V.

PATENT ASSIGNEE(S): Eli Lilly and Company, USA; Beasley, Charles M., Jr.;

Tran, Pierre V.

SOURCE: PCT Int. Appl., 17 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

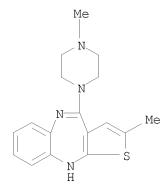
PAI	ENT	NO.			KIND DATE				APPLICATION NO.						DATE					
										WO 1996-US19573							19961204			
	W:	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BF	۲,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,		
		DK,	EE,	ES,	FΙ,	GB,	GE,	HU,	IL,	IS	3,	JP,	KΕ,	KG,	KP,	KR,	KΖ,	LC,		
		LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK	ζ,	MN,	MW,	MX,	NO,	NΖ,	PL,	PT,		
		RO,	RU,	SD,	SE,	SG,	SI,	SK,	ΤJ,	TM	1,	TR,	TT,	UA,	UG,	US,	UZ,	VN		
	RW:	ΚE,	LS,	MW,	SD,	SZ,	UG,	ΑT,	BE,	CH	Ι,	DE,	DK,	ES,	FI,	FR,	GB,	GR,		
		ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	BF,	BJ	J,	CF,	CG,	CI,	CM,	GΑ,	GN,	ML,		
					TD,															
CA	2248 2248	753			A1		1997	0918		CA	19	996-2	2248	753		1	9961	204		
CA	2248	753			С		2008	1118												
ΑU	9712	846			Α		1997	1001		AU	19	97-1	1284	6		1	9961	204		
ΑU	7195	17			В2		2000	0511												
ΕP	9000 9000	85			A1		1999	0310		ΕP	19	996-9	9436.	59		1	9961	204		
	R:																			
017	1213 1124 9612 9903	SI,	LI,	L∨,	FΙ		1000	0 4 1 4		017	1.0		1000	0.6		-	0061	004		
CN	1213	969			A		1999	0414		CN	19	196	1802	06		1	9961	204		
CN	1124	84/			C		2003	1022		DD	10	000	1054	0		1	0061	004		
BK	9612	549			A 70		1999	0/20		BK	19	196	1254: 2605	9		1	996I	204		
пU	9903	60E			A3		2000	1220		нυ	19	199	2002			1	9961	204		
	2000	5060 5060	50		T A S		2001			TD	1.0	07 1	5225	69		1	0061	204		
	3250				A		2000							35						
	1173				B1		2001							55			9961			
TT.	1261	57			Δ		2002	0220						57			9961	-		
PI.	1261 1869 3062 2249 2965	75			R1		2002	0312		DT	1.0	96-	2200	/ Q		1	9961			
ΔΤ	3062	69			Т		2001	1015		ΔΤ	19	996-9	9436	59		1	9961			
ES	2249	789			т3		2005	0401		ES	19	996-9	9436	59		1				
C7	2965	79			B6		2006	0412		C7.	19	98-	2905			1	9961	204		
NO	9804	198			A		1998	1102		NO	19	98-	4198			1	9980	911		
NO	3235	-			В1		2007	0611												
	Z APP									US	19	96-1	1312	7P		P 1	9960	311		
			_							TaTO	1.0	006 1	1010	572	,	7.7 1	0061	204		

AB The invention provides a method for treating extreme aggression comprising administering an effective amount of olanzapine to a patient in need thereof.

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC

IT 132539-06-1, Olanzapine

(Process); USES (Uses)
 (crystal polymorph II; olanzapine for
 treating excessive aggression)
RN 132539-06-1 HCAPLUS
CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl) (CA INDEX NAME)



OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 95 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1997:403057 HCAPLUS

DOCUMENT NUMBER: 127:13469
ORIGINAL REFERENCE NO.: 127:2623a,2626a

TITLE: Olanzapine for treatment of obsessive-compulsive disorder

INVENTOR(S): Beasley, Charles Merritt, Jr.; Tollefson, Gary Dennis

PATENT ASSIGNEE(S): Eli Lilly and Co., USA SOURCE: Brit. UK Pat. Appl., 18 pp.

CODEN: BAXXDU

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2305859	A	19970423	GB 1996-6614	19960329
PRIORITY APPLN. INFO.:			GB 1996-6614	19960329

AB Olanzapine is useful in the treatment of obsessive-compulsive disorder. The olanzapine may be the form II olanzapine polymorph. Preparation of the polymorph is described. Preparation of a tablet formulation is also included.

IT 132539-06-1, Olanzapine

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)

(olanzapine for treatment of obsessive-compulsive disorder)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

IT 132539-06-1D, Olanzapine, form II polymorph

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(olanzapine polymorph for treatment of

obsessive-compulsive disorder)

RN 132539-06-1 HCAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-(CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L27 ANSWER 96 OF 96 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1996:644040 HCAPLUS DOCUMENT NUMBER: 125:275918

ORIGINAL REFERENCE NO.: 125:51613a,51616a

TITLE: Preparation of crystalline

olanzapine

INVENTOR(S): Bunnell, Charles Arthur; Hendriksen, Barry Arnold;

Larsen, Samuel Dean

Eli Lilly and Co., USA; Lilly Industries Ltd. PATENT ASSIGNEE(S):

SOURCE: Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
	A1 19960925	EP 1996-302000	
R: AT, BE, CH,	DE, DK, ES, FI,	FR, GB, GR, IE, IT, I	
EG 23659	A 200/0326	EG 1950-2 CA 1996-2214005	19960321
CA 2214005	A1 19961003 C 20010703	CA 1996-2214005	19960322
		WO 1996-US3917	18860333
		BR, BY, CA, CH, CN, (
		KE, KG, KP, KR, KZ,	
		MX, NO, NZ, PL, PT, I	
SG, SI	rio, riit, riit, riit,	1121, 110, 112, 111, 11, 1	NO, NO, 5D, 5D,
	SD. SZ. UG. BF.	BJ, CF, CG, CI, CM, C	GA. GN. ML. MR.
NE, SN, TD,	TG		,,,
		AU 1996-52578	19960322
AII 9654279	Δ 19961016	AII 1996-54279	19960322
AU 706471	B2 19990617		
ZA 9602342	A 19970922	ZA 1996-2342 ZA 1996-2344	19960322
AU 706471 ZA 9602342 ZA 9602344 GB 2313835 GB 2313835	A 19970922	ZA 1996-2344	19960322
GB 2313835	A 19971210	GB 1997-19819	19960322
GB 2313835	В 19980916		
17Fr 19661786	10 19980407	DE 1990-19681286	19960322
CN 1179160 CN 1065536	A 19980415	CN 1996-192775	19960322
CN 1065536 BR 9607790	C 20010509 A 19980707	BR 1996-7790	19960322
DR 9007790	A 19980/0/	JP 1996-529532	
UF 11302333	72 19990302	HU 1998-2824	
HII 9802824	A3 20000128	110 1990 2024	19900322
HU 224989	B1 20060529		
JP 11502535 HU 9802824 HU 9802824 HU 224989 AT 9609021	A 20000115	AT 1996-9021	19960322
AT 406771	В 20000825		
AP 828	A 20000428	AP 1997-1065	19960322
W: KE, LS, MW,	SD, SZ, UG		
СН 690579	A5 20001031	CH 1997-2245	19960322
		EP 2000-203573	19960322
	B1 20031008		
		GB, GR, IT, LI, LU, I	NL, SE, PT, IE,
SI, LT, LV,	F'I	m. 1006 05100500	1006000
TW 442488	В 20010623	TW 1996-85103500 EE 1997-232	19960322
EE 3489	RI 50010812	EE 1997-232	19960322

AT ES PL TW	117610 204280 2159346 183723 513432 251627	A T T3 B1 B T	20010826 20010915 20011001 20020731 20021211 20031015	AT 19 ES 19 PL 19 TW 19	996-117610 996-302000 996-302000 996-322501 996-85103499 000-203573		19960322 19960322 19960322 19960322 19960322
	292688	В6	20031112		997-3000		19960322
	118872	B1	20031230		997-1761		19960322
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	SI, LT, LV,						
SK	284143	В6	20041005	SK 19	997-1218		19960322
IN	1996CA00514	A	20050304	IN 19	996-CA514		19960322
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SE	9703205	A	19970905	SE 19	997-3205		19970905
LV	12018	В	19980920	LV 19	997-163		19970908
$_{ m LT}$	4349	В	19980525	LT 19	997-148		19970916
FI	9703750	A	19970922	FI 19	997-3750		19970922
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IN	1999CA00383	A	20050311	IN 19	999-CA383		19990423
PRIORITY	APPLN. INFO.:				995-409566		19950324
				US 19	995-410474		
				EP 19	996-302000	A3	19960322
				EP 20	000-203573	АЗ	19960322
					996-CA514	АЗ	19960322
					996-US3854		
					996-US3917		
	e invention provide olanzapine by pro				legant stable p	olym	norph
	2539-06-1P, Olanza		CIOII IIOIII	100110.			

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(preparation of crystalline olanzapine)

RN 132539-06-1 HCAPLUS

10H-Thieno[2,3-b][1,5]benzodiazepine, 2-methyl-4-(4-methyl-1-piperazinyl)-CN (CA INDEX NAME)

OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)